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THE Thirtieth General Meeting of the Archaeological Institute of America will be held at the Metropolitan Museum of Art, New York, December 27-29, 1928.

The Annual Meeting of the Council of the Institute will be held during this period.

Members of the Institute and others who wish to present papers at the meeting, are requested to send the title and a brief résumé of their papers to Professor Rollin H. Tanner, General Secretary, New York University, University Heights, New York, N. Y., before November 15th.

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CORRESPONDENCES IN *I.G.*, I², 196 AND 198

SINCE the publication of our study, *A Revision of Athenian Tribute Lists*,¹ which was based for the most part on observations made in Athens during the summer of 1925, we have had an opportunity for further study in the Epigraphical Museum, and our attention has been devoted especially to the mutual relationship existing between the two inscriptions *I.G.*, I², 196 and 198. This problem was discussed in our previous publication (pp. 89-91), but some of the details of restoration were uncertain, and several discrepancies could not be satisfactorily explained. The further study of these items has given rise to the present paper, and it may be well to point out some of the considerations which have led to a second study.

On p. 91 of the publication referred to above several comparisons were made between the two inscriptions as restored to show their close correspondence. Two of these instances may be repeated here:

(1) In *I.G.*, I², 196: from Σπαρ[τόλιοι] (Col. II, line 34) to Στόλ[οι] (Col. III, line 2) is seven lines (Plate XVII).

In *I.G.*, I², 198: from [Σπαρτόλιοι] (Col. II, line 24) to Στόλ[οι] (Col. II, line 32) is eight lines (Plate VIII).

(2) In *I.G.*, I², 196: from Βρυ[κόντιοι] (Col. III, line 17) to Ν[άχσιοι] (Col. III, line 27) is ten lines (Plate XVII).

In *I.G.*, I², 198: from Βρυ[κόντιοι] (Col. II, line 47) to Νάχ[σιοι] (Col. II, line 56) is nine lines (Plate VIII).

The first of these parallels is not entirely satisfactory, because it is only approximate. But a more serious objection to be raised is that three of the names which fill the *lacuna* in *I.G.*, I², 198 (Σέρβ[υλιές], Σκαβλ[αῖοι], and Μενδαῖ[οι]) are found listed elsewhere in *I.G.*, I², 196, near the end of Col. IV. If these three names are subtracted from the *lacuna* in *I.G.*, I², 196, the sequence of names can be made the same in both inscriptions (with the exception of these three of course) by assuming five lines between Σπαρ[τόλιοι] and Στόλ[οι] in *I.G.*, I², 196, and equating these with the eight lines between the same words in *I.G.*, I², 198. To accomplish this, Col. II of *I.G.*, I², 196, must be shortened by two lines.

In the second of the parallel cases cited above we were uncertain at the time of our first publication of the sequence of names following Βρυ[κόντιοι] in *I.G.*, I², 196. We had suggested that fragment 41

¹ *Harvard Studies in Classical Philology*, Vol. XXXVII, 1926, pp. 55-98.

should be placed immediately below fragments 27c and 40 (*cf. op. cit.*, Plate XVI and p. 89), but it was not until 1927 that we were able to remove fragment 41 from the stele as reconstructed by Lolling and to make the test of actual trial. The fragment does in fact make a clear join, as we suspected, below fragment 27c, and the sequence of names from these two fragments is correct as given in our publication. Now the item in line 49 of Col. II in *I.G.*, I², 198, does not appear in the sequence in *I.G.*, I², 196, and with this item

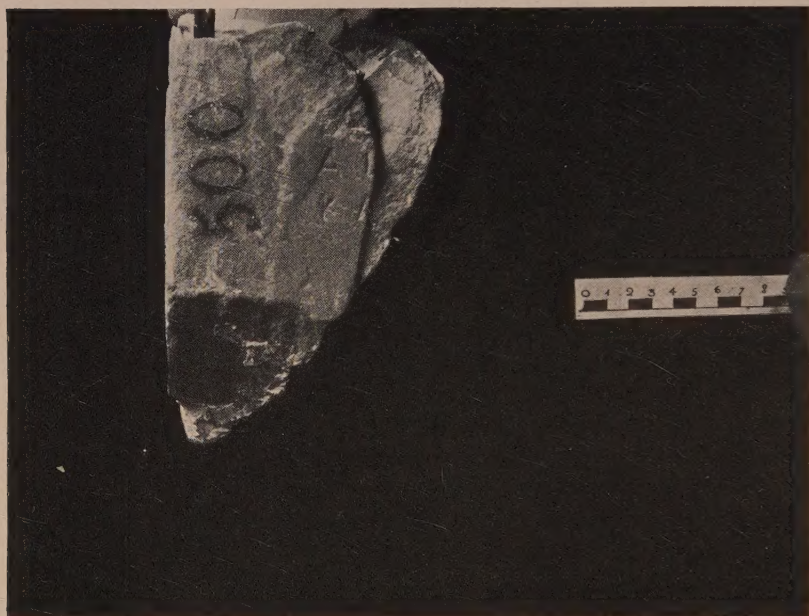


FIGURE 1. FIG. 33, *I.G.* I², 196

removed there are only eight lines in *I.G.*, I², 198, corresponding to ten lines in *I.G.*, I², 196. To make the correspondence perfect Col. III of *I.G.*, I², 196, must be shortened by two lines.

Thus in both cases the imperfect parallel of our former restoration can be made perfect by shortening the column length of *I.G.*, I², 196, by two lines. If this restoration were carried out in Cols. II and III, it would also be effective in Cols. I and IV, and to test this possibility we have examined again the stones which are involved in the reconstruction of the lower part of Col. I. The obverse face of the large stele into which these fragments are built has been studied with the aid of artificial light, and several items have been discovered which had escaped our attention in 1925.

When fragment 33 was set by the mason in its present plaster bed the marble surface of the fragment was in part covered by the plaster so that a false contour was presented to the eye. We found, in fact, that the fragment had not been broken away since Koehler's time, as stated by us on p. 89 of our earlier publication. On the contrary, the entire surface of the stone is preserved exactly as seen by Koehler (Fig. 1), for the part which we described as having been broken away was covered by a thin layer of plaster. Removing this without injury to the marble was a delicate process, especially where the plaster had been moulded into the broken contour of the edge of the stone. In this process, however, one further item of interest appeared. The letter which we have given as the initial *lambda* of $\Lambda[\epsilon\varphi\sigma\acute{\iota}\mu\alpha\nu\delta\omicron\iota]$ has the horizontal lower stroke of an *epsilon* and not the sloping lower stroke of a *lambda*. This fact appeared only after the plaster had been removed from the upper edge of the fragment. Our suspicions as to the contours of the fragments in *I.G.*, I², 196, were now aroused and we examined fragments 34 and 36, finding there also that the letters represented in our original Plate XVI as broken away were actually preserved under a carelessly applied layer of plaster! In the same way we have found it necessary to change some of the readings of fragment 20 in *I.G.*, I², 198, and these corrections will be pointed out below.

The fact that the initial letter preserved on fragment 33 of *I.G.*, I², 196, was an *epsilon* and not a *lambda* allows us to shorten Col. I also by two lines, reading this *epsilon* as the initial letter of $\epsilon[\rho\epsilon\tau\rho\acute{\iota}\omicron\nu\acute{\alpha}\pi\omicron\iota\kappa\omicron\iota]$ in line 36. Col. IV is made shorter by two lines, along with Col. III, by raising the group of fragments EM 4488+34+35+36+*I.G.*, I, 267, to a position two lines higher in the inscription (cf. Plate XVI, *Harvard Studies*, 1926, facing p. 86).

In our previous restoration we found no place in *I.G.*, I², 198, for the first five names of Col. II, *I.G.*, I², 196, and lines 42-44 in *I.G.*, I², 198, were restored as $\Lambda[\epsilon\varphi\sigma\acute{\iota}\mu\alpha\nu\delta\omicron\iota]$, $\text{Α}[\gamma[\iota\nu\acute{\epsilon}] \tau\alpha\iota]$, and $\text{[K]}\alpha[\sigma\omicron\lambda\alpha\beta\acute{\epsilon}\varsigma]$ on the basis of the parallel group which appeared in *I.G.*, I², 196, in the last three lines of Col. I (cf. *Trans. Proc. A. P. A.*, 1925, p. 261). But this parallel is no longer valid, because the item which has always been restored as $\Lambda[\epsilon\varphi\sigma\acute{\iota}\mu\alpha\nu\delta\omicron\iota]$ in *I.G.*, I², 196, must be read as $\epsilon[\rho\epsilon\tau\rho\acute{\iota}\omicron\nu\acute{\alpha}\pi\omicron\iota\kappa\omicron\iota]$, and we have no assurance that the $\text{Α} \iota$ -- and $\text{K} \alpha$ -- following it should be restored as $\text{Α} \iota[\gamma\iota\nu\acute{\epsilon}\tau\alpha\iota]$ and $\text{K} \alpha[\sigma\omicron\lambda\alpha\beta\acute{\epsilon}\varsigma]$. Indeed, if we are to follow the example of *I.G.*, I², 198, in our restoration here of *I.G.*, I², 196, these two names must be restored as two words ending in $\omicron\iota$ of six and seven letters respectively.

We suggest that *I.G.*, I², 196, Col. I, line 37, should read $\text{Α} \iota[\nu\iota\omicron\iota]$

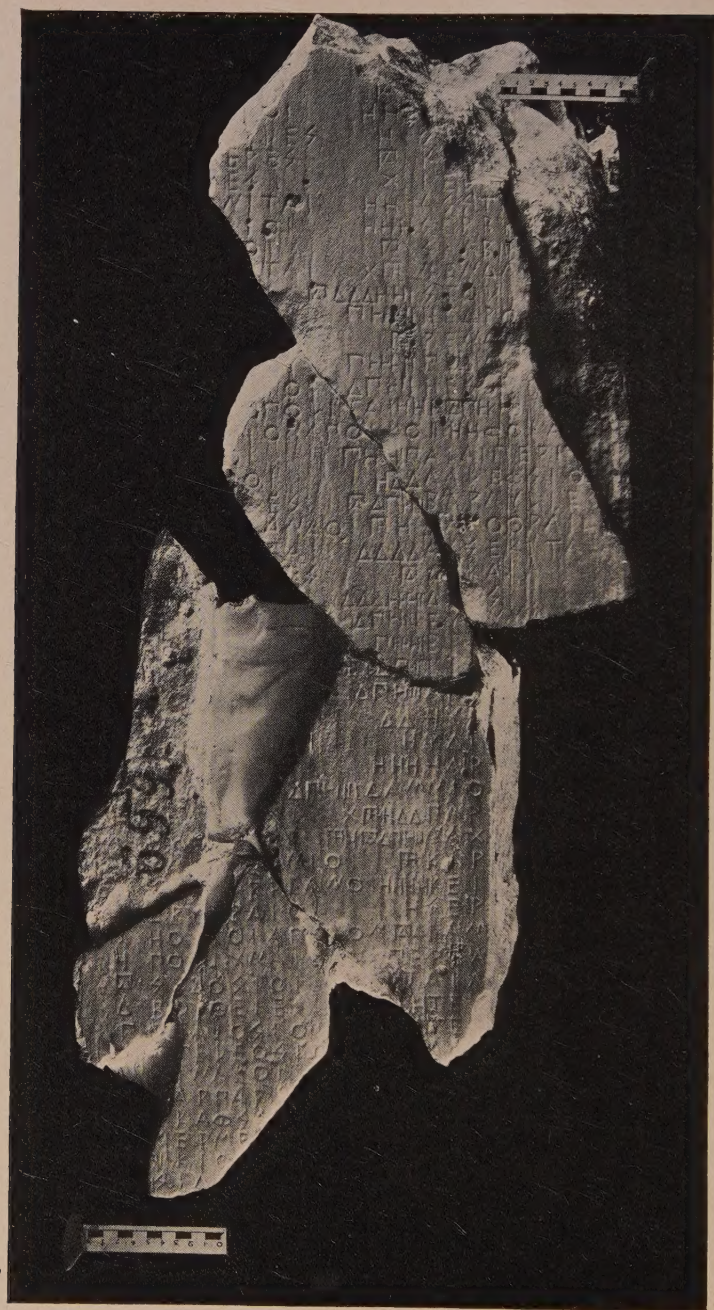


FIGURE 2. FRGS. 48+49+51+20+50+46, *I.G.* I², 198
 (This plate is made of two photographs placed together. The upper photograph shows frgs. 48+49)

to correspond with *I.G.*, I², 198, Col. I, line 39 [Α'νι]οι, and that *I.G.*, I², 196, Col. I, line 38, should read Κα[ύνιοι] to correspond with *I.G.*, I², 198, Col. I, line 40 [Καύνι]οι. Col. I of *I.G.*, I², 196, now corresponds in its entirety with Col. I of *I.G.*, I², 198, down through line 40.

A slight additional correction must be made in the restoration of *I.G.*, I², 198, for if [Καύνι]οι appears in line 40 of Col. I, another name with initial K and a tithe of 50 dr. must appear in Col. II, line 26. We restore Κ[εδριᾶται] here and make the further correction of reading [Χαλκεᾶ]ται in Col. I, line 31, in place of [Κεδριᾶ]ται. The word [Χαλκεᾶται] should also be restored in place of [Κεδριᾶται] in Col. I, line 29, of *I.G.*, I², 196.¹

We must now review our study of the names in Col. II of *I.G.*, I², 196, in their relation to the names of *I.G.*, I², 198. In particular, from Μύνδιοι (Col. II, line 10, *I.G.*, I², 196) to Κ[οδαπῆς] is eleven lines. As we have previously restored Col. I of *I.G.*, I², 198, there are sixteen lines between Μ[ύνδιοι] (Col. I, line 48) and [Κοδαπῆς] (Col. II, line 11), assuming that the names in the upper part of Col. II follow after line 56 of Col. I (*cf. Harvard Studies*, 1926, pp. 90-91).

In order that the correspondence here may be perfect, fragment 20 in *I.G.*, I², 198, must be lowered five lines so that the eleven lines of difference between Μύνδιοι and Κοδαπῆς in *I.G.*, I², 196, may be paralleled by the same difference of eleven lines in *I.G.*, I², 198.

It will be noticed at once that by this change the letters Χαλ-, which are now restored as part of the word Χαλ[κεᾶτα]ι in *I.G.*, I², 198, Col. I, line 52, become the initial letters of the word Χαλ[χε]ῖ[δ]ῶνιοι five lines below, that the final *iota* of Χαλ[κεᾶτα]ι becomes the final *iota* of Φα[ρβέλιω]ι, and that the initial *sigma* of line 53 becomes the initial *sigma* of Σ[ε]λυμβριοι. Fragments 20 and 46 are thus brought into such close proximity that we had them removed from the reconstructed stele so that the test of actual juxtaposition could be applied. Our *a priori* deductions were confirmed by the fact that the two fragments actually fit together to give the text as indicated above (Fig. 2).

The consequences of this change of position for fragment 20 are felt also in *I.G.*, I², 194, on the obverse face of the stele (*cf. Trans. Proc. A. P. A.*, 1925, Plate II, facing p. 258) where fragments 20 and 16 also make an actual join in such a way that fragment 20 must be lowered four lines in Col. IV of *I.G.*, I², 194 (Fig. 3).

Now it is obvious that fragment 20 cannot be lowered four lines in *I.G.*, I², 194, while it is lowered five lines in *I.G.*, I², 198, and yet the joins with which we are dealing are absolutely certain. The only

¹ This restoration will be discussed below, p. 291.

solution is that we must lower fragment 20 four lines in *I.G.*, I², 194 and 198, and then in *I.G.*, I², 198, the group of fragments 46+50+51+52 must be raised one line. Fortunately no change is necessary in the published text of *I.G.*, I², 201, where fragment 52 appears in

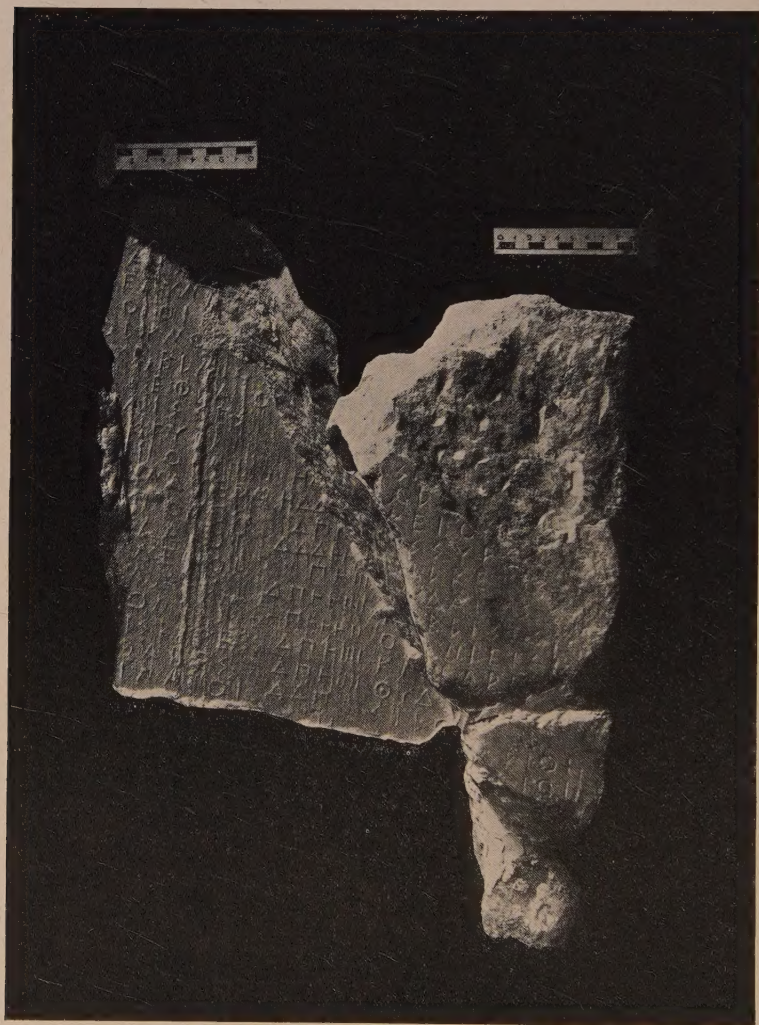


FIGURE 3. FRGS. 20+46+16, *I.G.* I², 194
(This plate is made of two photographs placed together.)

Col. I (cf. *Trans. Proc. A. P. A.*, 1925, Plate III, facing p. 264). The raising of fragment 52 in *I.G.*, I², 198, merely eliminates a slope from left to right in the lines of *I.G.*, I², 201, which may be ob-

served in our published plate, and our measurements given for *I.G.*, I², 201, on pp. 256-260 of the article mentioned above will need revision. But this can be done with greater accuracy after the dismemberment and reconstruction of the stele, a task in which we are now engaged. (This work is now finished.)

Raising fragments 46+50+51+52 in *I.G.*, I², 198, eliminates one other anomaly, because the initial Δ of the numeral in line 49 (frag. 51) is united with the figures ▯▯▯▯ in line 48 (frag. 49) and the tithe of K[αροι] in Col. II, line 48, of *I.G.*, I², 198, may now be given as Δ▯▯▯▯. We discover that the item which we have represented as occupying one line between K[αροι] and Αι — — in Col. II of *I.G.*, I², 198, and which had no parallel in Col. III of *I.G.*, I², 196, did not exist in fact, and a closer correspondence is again established between the two inscriptions.¹

Since the lower fragments of *I.G.*, I², 198, remain in their original positions, compensation for the line which has been eliminated above fragments 46+50+51+52 must be made by the addition of a line below this same group of fragments. The number of the lines in the inscription remains unchanged.

In *I.G.*, I², 194, raising fragment 46 one line means that the letters -δριοι follow the initial T of line 31. The word is to be restored as T[ελάν]δριοι. The item . . .⁶. . . σιοι falls in line 32, and line 33 must be left unrestored. The letter *alpha* which we have given both in facsimile and transcript as following the *tau* in line 31 does not exist on the stone. Since the surface of the marble above the letters -δριοι on fragment 46 is preserved uninscribed, we may be sure that the item Σλο- of line 30 was a word of at most five letters, and we restore Σλο[ι]. In line 28 the restoration K[αροι] is no longer valid, and the initial *omicron* of line 27 must be read as the initial *theta* of Θ[ρ]ανιῆται. The stroke which we have interpreted as the initial *pi* of line 26 may equally well represent the initial *h* of h[υ]βλισῆς, and we so restore it. When the surface of the stone was cleaned, a vertical hasta like that of a *pi* appeared after the *sigma* of line 20, and in line 28 the letters hitherto copied as ιαρυ took on a different aspect. The *iota* is too far to the left for an *iota* properly spaced. It looks more like a *lambda*. The final *nu* is also doubtful. We have omitted these letters, since they are uncertain, from our transcript. The end of Col. IV in *I.G.*, I², 194, must be reconstructed as follows, and we give the following synopsis

¹ The two letters Αι — — seem rather to have been 'Αρ — —. Since the paragraph above was written, fragments 49 and 51 have been removed from the stele and juxtaposed. They actually join as here determined with a considerable contact surface (Fig. 2).

as a correction of the text as published in the *Transactions and Proceedings*, 1925, plate facing p. 255.

15	— — — —	— — — — —
	— — — —	— — — — —
	— — — —	— — — — —
	— — — —	— — — — —
	— — — —	— — — — —
20	— — — —	Σ — — — —
	ΗΔ — —	’Αλ[οπεκοννέσιοι]
	ΗΔΔ —	Κεῖο[ι]
	ΔΓ[]	.σσυρι — —
	ΔΔΔ[+ +]	[X]αλκέτο[ρες]
25	Γ[]	[h]υδαῖς
	ΔΓ[+ +]	h[υ]βλίσες
	Γ[+ +]	Θ[ρ]ανιῆται
	ΔΓ[]	Κι. .αρ. .
	ΔΓ[]	Θυδα — — —
30	ΔΔΓ	Σίλο[ι]
	Η	Τ[ελάν]δροιοι
	— — — —	 ⁶ σιοι
	— — — —	— — — — —

It will be observed that the tithe of Θρανιῆται shows a variation during the first period, being ΔΓ[|+|] in *I.G.*, I², 192 and Γ[|+|+|] here, though it is possible that neither figure represents the true quota of the city.

On fragment 20 of *I.G.*, I², 198, we have further studied the badly weathered surface with the result that several new readings appear. (Cf. in this connection the published result of our former observations in the *Trans. Proc. A. P. A.*, 1925, p. 260.) The fragment has now been removed from the reconstructed stele and the letters have been read with the aid of different combinations of light and shadow.

The initial *alpha* of Αἰγ[ινε]ται must be rejected, for when the edges of the fragment were cleaned there was disclosed here on the badly weathered surface of the marble a circular cutting, like that of *omicron*, *phi*, or *theta*. The second letter, which was apparently an *iota*, proved to be *epsilon*, for traces of the horizontal strokes actually appeared on the surface of the stone. The third letter, *gamma*, is clear as first represented by us. Directly beneath this *gamma* is preserved the letter *rho*. We must restore here the words Φεγ[έριοι] and [K]α[ρ]βασσανδῆς in place of the earlier Αἰγ[ινε]ται and [K]α[σολαβῆς], and these words fall in lines 47 and 48 respectively. It will be noticed that in *I.G.*, I², 196, the item [Φ]εγ[έριοι] falls toward

the end of Col. IV, while Καρβασσανδ[ἔς] appears just before Οὐλιᾷται (Col. II, line 6) as it does in *I.G.*, I², 198.

In Col. I, line 46, of *I.G.*, I², 198, we now restore the first *epsilon* of fragment 20 as part of the word [Τ]ε[λάνδροι], instead of [Λ]ε[φσίμ]ανδοι, and this item is paralleled by the entry in Col. II, line 5, of *I.G.*, I², 196. Below Φα[ρβέλιω]ι in *I.G.*, I², 198, the Μυν- of Μύν[διοι] and the Δι- of Δι[νδιοι] are clear.

There are still left the first three entries of Col. II in *I.G.*, I², 196, which must be paralleled by the entries from Col. I of *I.G.*, I², 198, lines 41-45 (revised numbering) as follows:

I.G., I², 196

Ναχσιᾶτα[ι]

Θασθαρεῖς

Μυδόνες

I.G., I², 198

[Πασσανδ]ἔς

[Λεφσίμ]ανδοι

[...⁶...]ται

[...⁷...]ἔς

We propose that the first two of these items from *I.G.*, I², 198, be restored directly above [Φ]εγέτω[ι] in Col. IV of *I.G.*, I², 196, and that Col. I of *I.G.*, I², 198, lines 43-45, be restored:

[Ναχσιᾶ]ται

[Θασθαρ]ἔς

[Μυδόνες]

It is true that in *I.G.*, I², 198, line 44, there should be seven letters before the final ες, instead of six as in [Θασθαρ]ἔς, but there may have been some variation in the *stoichedon* order, as was the case with Θύσ[σι]οι in line 55 (revised numbering), where the restoration is certain because of the actual joining of the fragments, and where the *stoichedon* order of letters demands six spaces instead of five before the final οι.

The long word [Κ]αρ[βασσανδ]ἔς in line 48 reaches to the right as far as the numerals preserved before Κι[ανοί] in Col. II, and the letters ελ given in previous publications should actually be read as ες, before which part of a *delta* is preserved. The restoration is [Κ]αρ[βασσαν]ἔς. Notice also that there are six spaces to be filled before the final ες in Col. I, line 41. The disposition of the letters is correctly given in Plate VII of our earlier publication, though only five spaces are indicated in the transcript, Plate VIII. This item should be restored in Col. IV, line 31, of *I.G.*, I², 196 (revised numbering). We read [Πασσανδ]ἔς in preference to [Μαδνας]ἔς for reasons given below, p. 291.

Below [Α]ὐλ[ιᾶται] in *I.G.*, I², 198, Col. I, line 49, the names should be restored as in *I.G.*, I², 196, Col. II, lines 7 ff. The restoration Πε[ρκότε] must be abandoned in *I.G.*, I², 198, Col. I, line 54,

in favor of Π[δῖς]. The third letter seems to be a *delta* (though possibly *alpha* or *gamma*) and since the item is paralleled by *I.G.*, I², 196, Col. II, line 12, we know that the sixth letter was *sigma*. Π[δῖς] fulfills these requirements. The tithe, however, seems to have been 33 $\frac{1}{3}$ dr., to judge from the traces still on the stone. This is large for Πεδῖς, but since nothing is known of the tithe of Πεδῖς in the first and second assessment periods it is not an insuperable objection to the restoration. The final Η of the regular tithe of 900 dr. for Χαλχεδόνιοι is also preserved on fragment 20 in *I.G.*, I², 198, Col. I, line 56.

In order that the correspondence between the two inscriptions may be complete, we must assume also that lines 30–33 of *I.G.*, I², 196, Col. II, correspond to lines 20–23 of *I.G.*, I², 198, Col. II. The tithe of [] is, however, perfectly clear on the stone where we should expect the tithe of [] for Κνίδιοι in *I.G.*, I², 198. It stands alone and so cannot have formed part of the longer tithe []ΔΔ[] of Γαργαρές, even supposing that for some reason the order of the names in *I.G.*, I², 198, was here disturbed. We assume that the numeral [] was a stonecutter's error for [] and restore Col. II, line 23, as ([]) [Κνίδιοι].

Otherwise we find that *I.G.*, I², 196, is paralleled in its entirety by *I.G.*, I², 198, when the names in this latter inscription are taken in the following order:

- (1) Col. I through line 55 (revised numbering)
- (2) Col. II through line 55 (revised numbering)
- (3) Col. I lines 56–73 (revised numbering)
- (4) Col. II lines 56–73 (revised numbering)
- (5) Col. I lines 74–86 (revised numbering)

This is, in fact, the order which we proposed in our paper in *Harvard Studies*, pp. 89–91, and it may now, we believe, be accepted as an established fact. The correspondence holds true, with slight minor variations in the order within groups of two or three names, except that certain names which appear in the body of *I.G.*, I², 198, were listed only at the end of *I.G.*, I², 196, in Col. IV. These names are:

[Πασανδῆς]
 [Λεφσίμανδοι]
 [Φ]εγέτιω[ι]
 Σερβυλιῆς
 Σκαβλαῖοι
 Με(ν)δαῖοι
 Κύνιοι
 Καρύστιοι
 Κεῖοι

It may be observed that these names are listed here in the same order in which they appeared in *I.G.*, I², 198.

There remains as yet one anomaly in *I.G.*, I², 196, for Col. IV, line 30, finds no parallel in *I.G.*, I², 198. Here the stone is broken away and only the letter *mu* is preserved in the column of numerals. So far as we know there has been no attempt to explain this letter, which cannot be construed as part of any tithe. It must in fact be considered as part of a special prescript giving the reason why the names listed below it were not included in the body of the inscription proper. We suggest, purely by way of example, the restoration $\mu[\epsilon\rho\acute{\alpha}\ \tau\acute{\alpha}\ \Delta\iota\omicron\nu\beta\omicron\sigma\iota\alpha]$ for the line in question. It has no parallel in *I.G.*, I², 198, merely because it does not record the name of a city paying tribute. That the names below were cut later than the body of the inscription is proved by the fact that they are in a different hand. As evidence for this assertion we point to the fact that the *nu*'s following the prescript in Col. IV are more slanting and that the *rho*'s have a tail-stroke, while the other *rho*'s of the inscription have a simple rounding in addition to the upright bar (Fig. 4; cf. *Harvard Studies*, 1926, Plate XVI, facing p. 86). Since the tithes in the special appendix represent normal amounts of payment, it is doubly clear that the prescript deals with some irregularity in the time of payment rather than in the kind of payment, and the sense of our tentative restoration follows this interpretation.

The names which appear toward the end of *I.G.*, I², 198, form a group which deserves special study in itself. We shall note here only that the correspondence between *I.G.*, I², 196 and *I.G.*, I², 198 ends with Col. I, line 86, of *I.G.*, I², 198, and that the rest of the names in this inscription (Col. I, lines 87-112, and Col. II, lines 74-112) represent for the most part belated payments, or partial payments. Many of the names have already appeared in the main body of the text, a condition which is paralleled by *I.G.*, I², 196, and where this is true the payments are, so far as our evidence goes, fractions of the normal tithe which should be accredited to the city.

For this reason we choose to restore $[\chi\alpha\lambda\kappa\epsilon\acute{\alpha}] \tau\alpha\iota$ in *I.G.*, I², 198, Col. I, line 31, and $[\chi\alpha\lambda\kappa\epsilon\acute{\alpha}\tau\alpha\iota]$ in the corresponding position in *I.G.*, I², 196, Col. I, line 29, although the word $\Pi\epsilon\lambda\epsilon\iota\acute{\alpha}\tau\alpha\iota$ fulfills the epigraphical requirements equally well. The name $\Pi\epsilon\lambda\epsilon\iota\acute{\alpha}\tau\alpha\iota$ appears, however, credited with its full tithe of 50 dr. in *I.G.*, I², 198, Col. II, line 103. In a similar way we have chosen to restore $[\Gamma\alpha\sigma\alpha\nu\delta]\epsilon\varsigma$ instead of $[\mathcal{M}\alpha\delta\nu\alpha\sigma]\epsilon\varsigma$ in *I.G.*, I², 198, Col. I, line 41, because $\mathcal{M}\alpha\delta\nu\alpha\sigma[\epsilon\varsigma]$ appears with its full tithe of 100 dr. in *I.G.*, I², 198, Col. II, line 102. The restoration of *I.G.*, I², 198, Col. I, line 89, should probably also be $[\lambda\alpha\mu]\varphi\sigma\alpha[\kappa\epsilon\nu\omicron\iota]$ instead of $[\Sigma\kappa\alpha]\varphi\sigma\alpha[\iota\omicron\iota]$, and

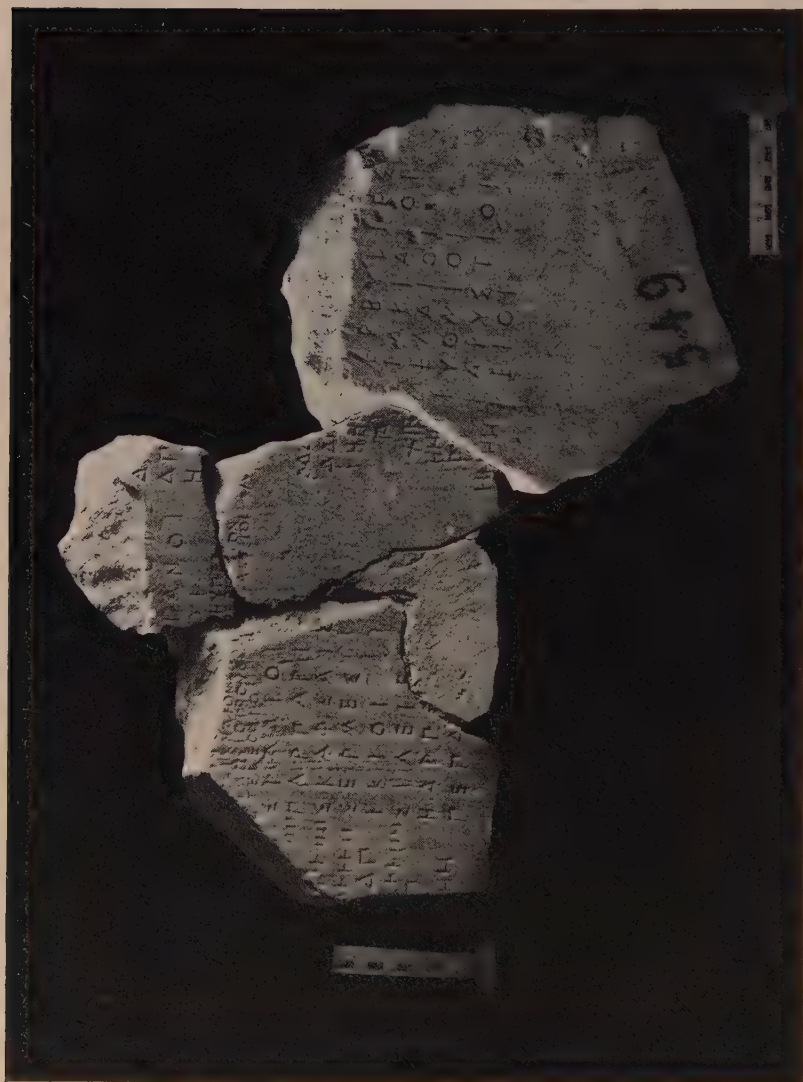


FIGURE 4. FRGS. 34+35+36+ I.G. I, 267 OF I.G. I, 196—

we suspect a partial payment on the entry in *I.G.*, I², 196, Col. IV, line 3, or *I.G.*, I², 198, Col. II, line 59.

Fragment 15, the lateral face of which appears in *I.G.*, I², 198, has also been removed from the reconstructed stele, and the badly weathered surface has been carefully restudied. The numerals which appear in Col. I, lines 28–31, are correct as published, but after the H of line 32 there is a faint but well defined $\overline{\Pi}$. The numeral must be read as H $\overline{\Pi}$. Below this are two numerical signs for 100 dr. They are so spaced, however, that the reading may be either HH or HH[.]. The restoration [*ἑσσοιοι*] is no longer appropriate after the tithe of 150 dr. in line 32, and we leave both lines 32 and 33 unrestored, as well as the corresponding lines in *I.G.*, I², 196, Col. I.¹ Even the numeral H $\overline{\Pi}$ in line 32 is not certain, because one or perhaps two figures may have been lost to the left of the numerical sign for 100 dr. The restoration [$\overline{\Pi}$ H]H $\overline{\Pi}$ [*ἑφέσιοι*] may be considered as a possibility, though too uncertain to be included in our transcript.

It remains to note the restoration in Col. IV of *I.G.*, I², 196, lines 26 ff., made possible by the change in position of the fragments of the inscription.

In line 26 read $\Delta[\overline{\Pi}|\overline{\Pi}|\overline{\Pi}|\overline{\Pi}]$ [*Παισ'ενοι*].

In line 27 read $\Delta[\overline{\Pi}|\overline{\Pi}|\overline{\Pi}|\overline{\Pi}]$ [*Περκό*]τε.

We leave line 28 unrestored.

[*Κολοφόνιοι*] is the only possible restoration for *I.G.*, I², 196, Col. II, line 20, and the item is paralleled in *I.G.*, I², 198, Col. II, line 9.

In *I.G.*, I², 198, Col. II, line 99, we restore [Σ]*ανα[ῖοι]*. The initial letter is not clear and so we have retained the brackets, but it may possibly have been *sigma*, and the restoration here proposed gives the only plausible explanation for the letters *ανα* which appear on the stone.

In *I.G.*, I², 198, Col. II, line 100, appears the item HHHH $\overline{\Pi}$ [\overline{\Pi}]|\overline{\Pi}|\overline{\Pi}|\overline{\Pi}|*Τορο[ναῖοι]*, where there can be no doubt either as to the amount of the tithe or as to the name of the city. It is significant to notice that in *I.G.*, I², 196, Col. IV, line 16, there appears the entry $\overline{\Pi}$ HH $\overline{\Pi}$ $\overline{\Delta}\overline{\Delta}\overline{\Delta}\overline{\Delta}$ |||| [*Σκιο*]ναῖοι. In our previous publication we followed earlier editors in keeping this restoration [*Σκιο*]ναῖοι, as well as the corresponding restoration [*Σκιο*]οναῖοι in *I.G.*, I², 198, Col. II, line 71. But it cannot be a mere coincidence that the partial tithes attributed to Skione in *I.G.*, I², 196, and to Torone in *I.G.*, I², 198, add together to give the round sum of ΧΗΗ. We restore, there-

¹ Since the quota H of line 30, Col. I, *I.G.*, I², 198 is more suitable for *ἑσσοιοι* than for *Οἰναῖοι*, we shift *ἑσσοιοι* to line 30 and make the necessary change in *I.G.*, I², 196.

fore, the name [Τορ]ναῖοι in place of [Σκιο]ναῖοι in *I.G.*, I², 196, Col. IV, line 16, and the name [Τορ]οναῖοι in place of [Σκι]οναῖοι in *I.G.*, I², 198, Col. II, line 71, and consider the payment recorded for Torone in *I.G.*, I², 198, Col. II, line 100, as representing the amount still due on the normal tribute of twelve talents which was not completely realized when the payments recorded in *I.G.*, I², 196, were made. In fact we were led to this discovery by the conviction that Skione could not appear in any case in the quota lists of the second period, *I.G.*, I², 195–198, because of the extraordinarily high tithe of Mende. In the first period the Mendaeans are credited with a tithe of 800 dr. (*I.G.*, I², 193, Col. II, line 5; *I.G.*, I², 194, Col. I, line 7); in the second period with a tithe of 1500 dr. (*I.G.*, I², 196, Col. IV, line 36; *I.G.*, I², 198, Col. II, line 31); and in the third period with a tithe of 500 dr. (*I.G.*, I², 201, Col. III, line 5).

These variations in amounts of tithe cannot be explained by the sudden increase and subsequent decrease in the prosperity of Mende itself, but we must conclude from the high tithe of Mende in the second period that the city was paying not only for itself but also for some of its neighbors. Of these, Skione alone was important enough to cause so great an increase of tribute, even though other and smaller cities may also have contributed. We notice that Θραμβάιοι does not appear in the second period, and since it appeared in the first period always in conjunction with Skione, we assume that the payments made during the second period by the Mendaeans covered the obligations of Thrambe as well as those of Skione. The restorations proposed above bear out our conclusion as to the tributary status of Skione, and we have an interesting example of group payment under a single name and subsequent ἀπόταξις. The tribute of Mende was reduced in the third period, and Skione and Thrambe both appear as making payment under their own names.

The changes in the texts of *I.G.*, I², 196 and 198, discussed in this paper, together with the possibility of making further restorations by comparing the documents with each other, make advisable the publication of new transcripts, which are given herewith.

Some slight changes also are involved in *I.G.*, I², 205, on the left lateral face of the large stele, and in *I.G.*, I², 203 on the reverse face, but these may be presented more briefly.

When fragment 33 was raised two lines in Col. I of *I.G.*, I², 196, it was necessary to raise also fragments 33+103+97 and fragment EM 2510 two lines in *I.G.*, I², 205 (*cf. Harvard Studies*, 1926, Plate III, facing p. 60). We give here a revision of the list of Caric states in *I.G.*, I², 205, with the addition of the restoration [Ναρισβαρῆ]s in line 81 and [Φασελίται] and [Κνίδιοι] in Col. I, line 89, and Col. II,

line 72, respectively. Both names appeared, because the tithes of 300 dr. are each certain, and we have thought it best to make the restoration in order to show that both cities paid tribute, rather than to omit the names because of uncertainty as to the order in which they appeared.

CARIC LIST IN *I.G.*, I², 205.

	Κ α [ρ] ι κ ό ς	Φ ό [ρ ο ς]
	Η ^Π Ἀστυπαλαιῆς	Γ ^Π Η -----
	Η Κινδυνῆς	ΔΓ[Γ III] -----
70	Π [Κ]αύνιοι	Η -----
	----- [Τ]ελάνδριοι	ΔΔΔΓ [Χαλκέτορες]
	----- [Πα]σανδῆς	ΗΗΗ [Κνίδιοι]
	----- [Κρ]υῆς	ΗΗ ^Π ΔΔ [Χερρονέσιοι]
	----- [Καρ]βασσαν[δῆς]	-----
75	----- [Α]ύλι[ᾶται]	-----
	----- Καρνανδῆς	ΠΔ[ΔΔΓ Γ III] [Μυλασῆς]
	----- Καρπάθο Ἀρκέσσεια	ΔΓ[Γ III] [Λεφσυ]ανδ[ῆς]
	----- Καμιρῆς	Η [Σνα]γγελῆς
	----- Κόιοι	Π [Κᾶ]ρες ἡδὼν Τύ[μν](ες
80	----- [Κε]δρ[ιᾶτ]αι	Η ^Π Κα[λ]ύδνιοι ἄρχει
	----- [Ναρισβαρεῖ]ς	ΔΓ Γ III Βα[ρ]γυλιῆται
	-----	ΔΓ Γ III Παρπαριῶται
	-----	Η ^Π ΔΓ[Γ III] [ἡα]λκαρνάσ[σιοι]
	-----	----- [Τε]ρμερῆς
85	-----	----- [Πελ]ει[ᾶται]
	Γ III] [Πεδιῆς ἐγ Λίνδο]	-----
	ΔΓ[Γ III] -----	-----
	[Δ]ΔΔ[Γ Γ II] -----	-----
	ΗΗΗ [Φασελῖται]	-----

It has already been pointed out that the length of the Caric list in *I.G.*, I², 205, cannot be determined with certainty (*Harvard Studies*, 1926, p. 86), but we think it probable that the length of our previous restoration should be reduced by at least one line. In the argument of our article here mentioned (p. 85) we assumed that the last column of *I.G.*, I², 203, contained 38 lines, and by a study of the interrelation of the fragments in *I.G.*, I², 203, 205, and 196, we reached the conclusion that there was a *lacuna* of two lines between the words [Καρ]βασσαν[δῆς] and [Α]ύλι[ᾶται] in the Caric list of *I.G.*, I², 205, and that *I.G.*, I², 196, should be restored as an inscription of 40 lines (*op. cit.* pp. 86-87). We now know that our hypothesis as to the length of the last column in *I.G.*, I², 203, was not correct, for *I.G.*, I², 196, is an inscription of 38, not 40, lines.

But the interrelation of the fragments between the three inscriptions is still valid, and we discover that the *lacuna* of two lines between the words [Καρ]βασσαν[δῆς] and [Α]ύλι[ᾶται] in *I.G.*, I², 205, must be omitted, and that the last column of *I.G.*, I², 203, contains only 36 lines. In other words, fragment 97 is moved up by two lines in *I.G.*, I², 203, as fragment 33 is moved up by two lines in *I.G.*, I², 196. We have tested fragments 96 and 97 for the possibility of a join in *I.G.*, I², 203, without any positive result. The two fragments were certainly close together, but the contact surface seems to be gone.

At the same time, Woodward's fragment (*J.H.S.*, 1908, p. 291) retains its original position in *I.G.*, I², 203, and the *lacuna* between it and fragment 97 must be shortened by two lines. We eliminate here the names Κύθνιοι and Σερίφιοι and restore them at the beginning of the Island list. The *lacuna* at the end of the Caric list is at the same time shortened by two lines.

We give here a revised transcript of the last column of *I.G.*, I², 203, to show the changes involved in the above reconstruction.

	— — — —	[Πελειᾶτ]αι
	— — — —	[Μύνδιοι]
5	— — — —	[Καλύδνιοι]
	— — — —	[Τερμερῆς]
	— — — —	— — — — —
	— — — —	— — — — —
	— — — —	— — — — —
10	— — — —	— — — — —
	— — — —	— — — — —
	— — — —	— — — — —

		[Νεσιοτικὸς Φόρος]
	— — — —	[Κύθνιοι]
15	— — — —	[Σερίφιοι]
	— — — —	[Νάχσιοι]
	— — — —	[Σίφνιοι]
	— — — —	[Τέ]νιοι
	— — — —	Ἄνδριοι
20	— — — —	Καρύστιοι
	[Δ□]—	Γρυνχῆς
	— — — —	Κεῖιοι
	— — — —	Μυκόνιοι
	— — — —	Πάριοι

[illegible]

[Ε]π ἰ τ ῆς ἀρ χ ῆς τ ῆς ὁ γ δ ὁ ες]
 ἡ ἑ ἰ Δ ι ο δ [. . ος ἐ γ ρ α μ μ ᾶ τ ε υ ε]
 [Π] α ι ο ν ἰ [δ ες]

	[ΔΓ]ΓΙΙΙ	Ναρισ[βαρῆς]		
5	[Η]Η ^Π ΔΔΔ	Τενέδ[ιο]ι		
	[Δ]ΓΓΙΙΙ	Σταγ[ιρ]ῖται		
	ΓΙΓΓΙΙ	Γεντί[ν]ιοι	ΔΓΓ[ΙΙΙΙ]	
	Η ^Π	Κεραμ[ῆ]ς	ΓΓΓ[ΙΙΙ]	
	ΗΗΗΗ	Καμ[ῆ]ς	ΗΗΗ	[Κολοφόνιοι]
10	ΗΗ	ἡλι[κ]αρνάσσιοι	Δ	
	Η	Μυριναῖοι	ΔΓΓ[ΙΙΙΙ]	[Κοδαπῆς]
	Η	Μεκυ[βε]ρναῖοι	ΓΓΓ[ΙΙ]	[Κυ ---]
	[Δ]Δ[Δ]ΓΓΓ	Πλαγα[ρ]ῆς	ΔΓΓ[ΙΙΙΙ]	[Διοσιρίται]
	[Η]Η	Πεδα[σ]ῆς	ΔΔΔΓ	[Χαλκέτορες]
15	[Π]ΗΗΗΗ	Κυμαῖοι		[Ὀλοφύχσιοι]
	[Δ]ΓΓΓΙΙΙ	Πιταν[α]ῖοι		[Κλαζομένιοι]
	[Δ]ΓΓΓΙΙΙ	Γρυν[ει]ῆς		[Ἰαβδερίται]
	ΗΗΗ	Χερρονέσιο[ι]		[Καλύδνιοι]
	[Δ]ΓΓΓΙΙΙ	Πύρριοι	ΔΔ[Δ]ΓΓΓ	[Νοτιῆς]
20	[Δ]ΓΓΓΙΙΙ	Νεάπολις		[Γαργαῖες]
	ΗΗ	Κυλάντιοι		[Φασελῖται]
	[Δ]Δ[Δ]ΓΓΓ	Κυρβισῆς		[Διῆς]
	[Δ]Δ[Δ]ΓΓΓ	Χῖο[ι]	(Π)	[Κνίδιοι]
	ΗΗΗ	Ἀφν[τ]αῖοι	ΗΗ	[Σπαρτόλιοι]
25	Η	Συν[αγγ]ελῆς	Η	Σ[τρεφ]οῖοι
		[Τερμ]ερῆς	Π	Κ[εδρι]ᾶται
		[Ἰδυμ]ῆς	Χ	Ἰελ[ύ]σιοι
	Η ^Π	[Μαρ]ονῖται	ΗΗ	Ἀσστ[υ]παλαιῆς
	Π	[Θερμ]αῖοι	ΗΗΗ	Σερβυ[λι]ῆς
30	Η	[ἡ]έσσιοι	Π	Σκαβλ[αῖ]οι
	Π	[Χαλκεᾶ]ται	Χ ^Π	Μενδαῖ[οι]
	-- Η ^Π	... ⁶ ...ι	ΠΔΔΔΓΓΓ	Στόλιο[ι]
	ΗΗ[?]		ΓΓΓΓ	ἡεδρόλ[ιοι]
			Γ	Ῥενα[ῖ]ες
35		... ⁷ ...ι	ΓΓΓΓ	Π[ρ]ια[πῆ]ς
		... ⁷ ...οι	ΔΓΓ	ἡεσ[τ]ιαῖες
		[Δικαι]οπολῖται	ΗΗΗΠΓ	Κοῖο[ι]
	[vacat]	Ἐρετρ[ι]ῶν ἄποικοι	ΗΗΗ	Φοκα[ῖ]ες
		[Ἀῖν]οι	ΓΓΓΓ	Παλαιπερκ[ό]σιοι
40		[Καύν]ιοι	ΗΔΔ	Γαλέφσιο[ι]
		[Πασανδ]ῆς	ΠΔΓΓΓ	Βαργυλιῆ[ς]
		[Λεφσίμ]αρδοι	ΠΗ	[Σ]αμοθρᾶικ[ες]
		[Ναχσιᾶ]ται	ΔΔΔΔ	Ἀσσερίτα[ι]
		[Θασθα]ῖες	Π	Δ[ῖ]καία
45		[Μυδόν]ες	ΔΔΔΓΓΓ	Δι[ῆ]ς
		[Τ]ε[λ]άνδριοι	ΔΓΓΓ	Εὐ[ρ]υμαχ[ῖ]ται
		Φεγ[έ]τιοι	ΓΓΓΓ	Βρυκόντιοι
		[Κ]αρ[βα]σανδῶες	ΔΓΓΓ	Κι[αν]οί
		[Α]ὐλ[ιᾶ]ται	ΔΓΓΓ	Ἄρ ---
50		[Κ]ρυ[ῆ]ς	ΔΔ	ἡυ[δαῖ]ες
		Φα[ρβέ]λιοι	Η	Ῥδι[σ]σῆς
		Μύν[δι]οι	ΗΗΗ	ἡαιρ[αῖ]οι
		Λί[ν]διοι	ΔΓΓΓ	Δαμνω[τει]χῖται
	[ΔΔ]ΔΓΓΓ	Πε[δ]ιῆς	Χ ^Π ΗΔΔ	Πάρ[ιοι]
55	Η ^Π	Θύσ[σι]οι	ΠΗΠΔΓΓ	Νάχ[σιοι]
	[Π]ΗΗΗΗ	Χαλ[χε]δ[ό]νιοι	Π	Καρ[ύ]στιοι
		Σ[ε]λυμβριανοί	ΗΗΗΗ	Κεῖ[οι]
		Ἐρυ[θ]ραῖοι	Η	Σερ[ί]φιοι
	vacat	ἡούτοι ἀπ' [αὐτ]ῶν	ΠΔ	Λαμ[φ]σακενοί
60	Η	Πολιχναῖο[ι] ἡυπέρ [ἐ]α[ντῶν]		Αἰγ[άν]τιοι
	Π	Σιδόσιοι	Π	Τέ[ν]ιοι
	Δ	Βουθειῆς	[ΗΗ]Η	Τέ[ν]ιοι
	ΔΓ	Ἐ[λ]αιόσιοι		Ἄν[δ]ριοι
	Γ	[Π]τελέδσιο[ι]		[Μυκόν]ιοι
65		[Σ]ίγγιοι		[Θάσι]ο[ι]
		[Π]αρπαρι[ῶ]ται		[Ἄβυ]δανοί
		[Σ]καφσα[ῖ]οι		[Ἐρε]τριῆς
		[Σ]ερμῆ[ς]		[Βρυ]γχεῖ[ς]
	[ΔΔ]Γ	Ἴκιοι		[Σίφ]νιοι
70	[ΔΓ]ΓΓ	Σιγ[ει]ῆς		[Τορ]οναῖοι
		[ἡαρ]παγίανοι		[Ἰάτ]αι
		[Πε]παρέθιοι		[Διδυμοτ]ειχῖται
		[Κύθν]ιοι		...οι
		[Δαρδαν]ῆς		...οι
75		[Πριαν]ῆς		... ⁵ ...ι
		[Στυρ]ῆς		
		[ἈθENA]ῖοι		
		[Βερύ]σιοι		
		[Βυζάν]τιοι		
80		[Χαλκιδ]ῆς		
		[Νεοπολῖ]ται		
		[Λαμπόν]εια		
		[Παισεν]οί		
		[Περκότ]ε		
85		[... ⁵ ...οι]		
		[... ⁷ ...οι]		
		[... ⁵ ...οι]		
		[Ἀζ]εῖοι		
		[Λαμ]φσα[κε]νοί		
90		[Χ]ερ[ρ]ον[ε]σῖται		
		Κοῖοι		
	[ΔΔΔΔΓ]Γ	Βεργαῖ[οι]		
	ΠΓΓΓ	Θάσιοι		
	ΠΔΔΓ	Κυζικε[ν]οί		
95	ΔΔΔΓ	Ἐφαισσ[τι]ῆς		
	ΔΔΔΓΓΓ	Λιμν[α]ῖοι		
	-- ΔΠΠ	Ἀβυδεν[οί]		
	ΠΓΓΓ	Δαρδα[ν]ῆς		
	Π	Ἐλαιό[σι]οι		[Σ]ανα[ῖ]οι
100	ΓΓΓ	Σιγ[ει]ῆς	ΗΗΗΗΠΓ	Τορο[ν]αῖοι
	ΠΓΓΓ	Τενέδιοι	ΔΔΔΓ	Κοῖοι
	ΗΗΗΗΠ	ΒυζάντιοιΔΔΔ	Η	Μαδνασ[ῆ]ς
	ΗΗΗΠΔΔ	Βυζ[ά]ντιοι ΔΔΓΓ	Π	Πελειά[τ]αι
	Η	ἔς [Ε]ῖονα ἡαβδερί	Η	Μυλασῆς
105	.ΔΔΔ.	[Ἀν]ιοι ΓΓΓ	ΔΔΔΔΓ	ἡυρομῆς
		...οι	ΓΓΓΓ	Καρνανδῆ[ς]
		Μιλ[έ]σιοι	ΔΔΔΓ	ἔς Τένεδον
		Λάτ[μ]ιοι	ΔΔΔΓ	ἔβς Τένεδον
		Μυέ[σ]σιοι	[Δ]ΔΔΓΓ	Ἐρυθραῖοι
110	[Π]ΗΗΠ	Ἐφέσ[ιοι]	.Ι	Μυριναῖοι
	Η	Ἰασῆς	ΠΓ	Ἰμβριοι
	Η	Κινδυῆ[ς]	ΠΔΔΔΓ	Ἐφ[αι]στιῆς

25	----	[Δ]ιῆς ἀπὸ Κεν[αίο]
	----	[Ἀθῆναι] Δι[άδες]
	----	[Ἰῆται]
	----	[Ῥεναῖοι]
	----	[Στυρῆς]
30	HH[H]	[Ἐρετριῆς]
	HHH	[Χαλκιδῆς]
	ΔΓΓ-III	Σύ[ριοι]
	H ^π	Μυρ[ωαῖοι]
	HHH	Ἐφ[αιστιῆς]
35	H	Ἰμ[βριοι]
	XXX	Αἰ[γινῆται]

We now see that there was room for 45 Caric names in *I.G.*, I², 203. There were 43 Caric names in *I.G.*, I², 202, and 43 Caric names in *I.G.*, I², 204. We propose, therefore, to restore the Caric list of *I.G.*, I², 205, with 22 lines in each column of names, making a possible list of 44 names in all. This is the arrangement shown in our transcript above, and it presents a list shorter by one line than that published in *Harvard Studies*, 1926, Plate XIX, facing p. 96. It must be remembered, however, that we consider this a probable, though not a necessary reconstruction. The list may have contained, epigraphically, as few as 36 names.

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THE ANTIKYTHERA BRONZE YOUTH AND A HERM-
REPLICA

IN *Art and Archaeology* of September, 1927,¹ the late Dr. Cornelia G. Harcum published several Greek and Roman statues recently acquired by the Royal Ontario Museum of Archaeology at Toronto, Ontario. Among these is a fine marble herm² which is described as an early Roman copy of a youthful Heracles, or athlete, whose original belonged to the fourth century B.C.

While I was engaged, during the summer of 1924, in numismatical investigations in the Royal Ontario Museum, my attention was strongly attracted by this piece of statuary. The face of the herm, I felt, bore a remarkable resemblance to that of the famous Antikythera (Cerigotto) bronze youth that was recovered from the sea more than a quarter of a century ago. A reëxamination which I have recently made of both the Toronto marble and the bronze in the National Museum of Athens has convinced me of a very close relationship existing between the two. This study has been undertaken less with a view to republishing the herm than in the hope of bringing new light to bear therefrom upon the vexed question of the place which the statue should occupy in the history of Greek sculpture.

Few ancient works have been more thoroughly studied than has the ephebe from Antikythera,³ and few topics indeed have given rise to greater diversities of opinion, particularly in the earlier phases of the investigation. Not only has it been assigned to widely separate schools of art, and sometimes even regarded as an original work of one of the great masters, but it has been furnished with a series of dates that are spread over at least four centuries. It was placed in the fifth century B.C. by the Greek scholar Arvanitopoulos;⁴ in the fourth by Kavvadias,⁵ Waldstein (Walston),⁶ Th. Reinach,⁷ W.

¹ *Art and Archaeology*, XXIV, 1927, pp. 55-62.

² *Ibid.*, pp. 57, 58, with two views.

³ The literature dealing with the statue is most extensive. For its most important publications see: Svoronos, *Das Ath. Nat. Mus.*, 1908-11, Textbd. I, pp. 18, 19; Tafelbd. I, Pls. I, II; *Arch. Eph.*, 1902, Pls. 7-12; *A.J.A.*, Second series, VII, 1903, pp. 464, 465; Ernest Gardner, *J.H.S.*, XXIII, 1903, pp. 152-156; Kavvadias, *Arch. Anz.*, 1901, pp. 17-19; also *J.H.S.*, XXI, 1901, pp. 205, 206; Cooley, *Records of the Past*, II, 1903, pp. 207-213; Stais, *Marbres et Bronzes*, 1910, pp. 302-304; Th. Reinach, *Gaz. B.—A.*, XXV, Pér. III, 1901, pp. 295-301. For complete bibliography down to 1921 see Hyde, *Olymp. Vict. Mon.*, 1921, pp. 80-84. More recent articles (e.g., Ernest Gardner in *J.H.S.*, XLIII, 1923, pp. 139-143) deal with the question of the pose and motive of the statue.

⁴ Arvanitopoulos, in the monograph, 'Ο Ἐφηβος τῶν Ἀντικυθήρων, Athens, 1903.

⁵ Kavvadias, *J.H.S.*, XXI, 1901, pp. 205, 206.

⁶ Waldstein (Sir Charles Walston), *Monthly Review*, June, 1901, pp. 110-127.

⁷ Th. Reinach, *Gaz. B.—A.*, XXV, Pér. III, 1901, pp. 295-301.

Klein,¹ and others. As early as 1903, Frost² declared the statue to be Hellenistic. This view received little notice at the time, but has more recently been accepted by a majority of critics, including Ernest Gardner,³ Dickins,⁴ Richardson,⁵ and Hyde.⁶ Bulle⁷ regards the work as a Roman copy whose original belonged to the fourth century—a view to which Lippold, in his recent work on ancient copies,⁸ hesitates to commit himself. Lawrence,⁹ whose notice is confined to the head of the statue, considers it as representing a comparatively early type, which was “brought up to date” late in the first century B.C. That this very late point of time might be possible in view of the matter of the shipwreck seems now to be quite probable. The catastrophe that sent the shipload of statuary to the bottom was long supposed to have occurred in the time of Sulla, or at the latest not subsequent to the year B.C. 50;¹⁰ but recently Leroux¹¹ has shown that one of the ship’s instruments bears the name of a month which is not known earlier than B.C. 30. Finally, von Mach¹² was so displeased with the restoration which the French sculptor André made of the statue that he seems willing to grant it a place in any age or school of art.

In the matter of style—Waldstein¹³ first ascribed the work to Praxiteles or his school, but later observed in it strong Scopaeic tendencies.¹⁴ Th. Reinach¹⁵ thought that it was executed by some sculptor strongly under the influence of Polycleitus, such as perhaps Euphranor or the young Praxiteles. Arvanitopoulos¹⁶ assigned it with some hesitation to a master who has often proved useful in like cases, namely, Alcamenes. Ernest Gardner¹⁷ and Dickins¹⁸ are in essential agreement in recognizing in the statue the presence of various eclectic elements derived from Praxiteles, Scopas, and

¹ W. Klein, *Gesch. d. gr. Kunst*, 1904-07, II, pp. 403, 404.

² Frost, *J.H.S.*, XXIII, 1903, pp. 217, 218.

³ Ernest Gardner, *Handbook of Gr. Sculp.*, 1920, p. 532.

⁴ Dickins, *Hellenistic Sculp.*, 1920, pp. 55, 56.

⁵ Richardson, *History of Gr. Sculp.*, 1911, p. 276.

⁶ Hyde, *Olymp. Vict. Mon.*, 1921, p. 81.

⁷ Bulle, *Der schöne Mensch*, 1912, pp. 115, 116.

⁸ Lippold, *Kopien u. Umbild. gr. Stat.*, 1923, pp. 72, 127.

⁹ Lawrence, *Later Greek Sculp.*, 1927, pp. 128, 129.

¹⁰ Cf. Lippold, *op. cit.*, pp. 71, 250.

¹¹ Leroux, *Lagynos*, 1913, p. 102; quoted by Lawrence, *op. cit.*, p. 129.

¹² Von Mach, *Greek Sculpture, Its Spirit and Principles*, 1903, pp. 325, 326. He had not, however, actually seen the statue.

¹³ Waldstein, *l.c.*

¹⁴ Waldstein, *London Illustrated News*, June 6, 1903.

¹⁵ Th. Reinach, *l.c.* The view that the statue is a copy of the Paris of Euphranor is supported by Stais (*Marbres et Bronzes*, pp. 302-304), Miss M. Bieber (*Jahrb. Arch. Inst.*, XXV (1910), pp. 164 ff.), and F. P. Johnson (*Lysippos*, 1927, pp. 44-45).

¹⁶ Arvanitopoulos, *op. cit.*

¹⁷ Ernest Gardner, *Handbook of Gr. Sculp.* 1920, pp. 532, 533.

¹⁸ Dickins, *l.c.*

Lysippus. Lawrence¹ regards the original as a late Polycleitan or Naucydean type. Klein² thought the statue to be a sort of fore-



FIGURE 1. BRONZE STATUE OF EPHEBE FROM ANTIKYTHERA IN THE NATIONAL MUSEUM, ATHENS

runner of the Vatican Apoxyomenos.³ Bulle⁴ considers it as standing midway, as it were, between Polycleitus and Lysippus.

¹ Lawrence, *op. cit.*, p. 129.

² W. Klein, *l.c.*

³ See Brunn-Bruckmann, *Denkmäler*, no. 281.

⁴ Bulle, *op. cit.*, p. 115.

A careful reconsideration of these authorities as well as a reëxamination of the statue itself leads to the following general conclusions:



FIGURE 2. HEAD OF THE BRONZE STATUE FROM ANTIKYTHERA IN THE NATIONAL MUSEUM, ATHENS

The work belongs to a Hellenistic school which is earlier than the Pergamene schools. The eclectic principle is exceedingly evident. The general conception of the statue is Lysippic, especially in respect

to the bodily proportions which resemble those of the Agias,¹ the stance, and the expression of the eye. The shape of the skull, including the bony structure of the face, may be described as Attic with certain resemblances to the Scopaeic Meleager type,² but showing tendencies towards dolichocephalism that have probably been derived from some Argive school. It may be compared with the head of the Doryphoros of Polycleitus;³ but those who have seen in the statue as a whole any appreciable Polycleitan element have apparently been deceived by the faulty restoration of the torso, which conveys an impression of stoutness that the newly completed statue must have lacked. They may also have based too much on the droop of the head, which is Praxitelean. The treatment of the hair seems thoroughly Scopaeic.⁴ The nose and forehead and the main lines of the face are mildly Praxitelean.

To return to the herm in Toronto—the marble had been purchased at an auction sale of Messrs. Sotheby and Co., in London, and had originally belonged, as stated by Dr. Harcum,⁵ to the Earl of Brownlow of Ashridge whose collection, I understand, has been little visited or known. Presumably the herm had been in the family's possession a long time prior to the Antikytheran discovery of 1900. The head has been traditionally called a youthful Heracles apparently from its general resemblance to the type represented in the famous Heracles of Lansdowne House, London.⁶ Dr. Harcum⁷ draws attention to the overcleaning of the marble; but the original surface seems nowhere to be destroyed except perhaps about the lids of the left eye.

The treatment of the hair and the superciliary region shows that the work is a copy of a bronze original. The careful workmanship and the precise modelling of the whole, with the entire absence of the running-drill and the very sparing use of the borer, suggest the age of Augustus as the time of its execution. The head is somewhat above life size, and is so turned that the face is looking directly over

¹ See *Fouilles de Delphes*, IV, 1904, Pls. LXIII, LXIV; *B.C.H.*, XXIII, 1899, Pls. X, XI. It is assumed in this study that the Agias is a copy of a Lysippic original. A recent and most convincing argument in its support is that of Poulsen, *Delphi*, 1920, pp. 278–290. Contrast F. P. Johnson, *op. cit.*, pp. 117 ff.

² For a discussion of the type, with illustrations, see Hyde, *op. cit.*, pp. 311–316.

³ The details can best be studied in the bronze bust by Apollonius in Naples. See Brunn-Bruckmann, *op. cit.*, no. 336.

⁴ This arrangement of hair, with a series of locks like little flames in front, was probably established by Scopas; it appears on copies of many works attributed to him and there is some indication of the "flame-locks" on the Tegean heads in Athens. But these locks are occasionally seen as early as the fifth century. They are used very sparingly by Praxiteles and Lysippus.

⁵ Harcum, *op. cit.*, p. 57.

⁶ Furtwängler, *Masterpieces of Gr. Sculp.*, 1895, fig. 125. It is regarded as Lysippic by Michaelis (*Anc. Marbles in Gr. Brit.*, 1882, pp. 451, 452) and Hyde (*op. cit.*, p. 298).

⁷ Harcum, *op. cit.*, p. 57.

the right breast. The height of the outer surface of the left shoulder is about a centimetre lower than the right; and as the bust terminates a few inches on either side of the neck, this difference would indicate that the right shoulder of the original statue was very considerably higher than the left. The impression imparted to the observer is that the right arm must have been elevated. The neck is unusually stout, but it is fleshy rather than muscular.

The head is massive and finely proportioned, with broad forehead



FIGURE 3. PROFILE OF HEAD OF THE BRONZE STATUE FROM ANTIKYTHERA IN THE NATIONAL MUSEUM, ATHENS

and rounded crown, and reproduces very closely the lines of the Vatican Apoxyomenos. The forehead is carefully modelled, with clear indication of the *linea temporalis* and with a moderately prominent superciliary ridge. This bar, with the shallow wrinkle above it in the middle of the forehead, is distinctly of the Lysippic type. The lines of the eyebrow are clear-cut and sharp. The extremities of the lids overlap,¹ and the inner ends of the eyes are somewhat deeply placed, but the effect is altogether Lysippic.

The nose is constructed on generous lines, while the upper lip is short. The mouth is modelled with extreme care, and is open to the extent of half a centimetre. The modelling of the lips is continued

¹ This can hardly be seen on the left eye, where acid appears to have destroyed the surface of the stone.

quite within the mouth itself, and behind is visible the wall of the teeth. Here the individual details are precisely those of the Agias and Apoxyomenos heads, but the general effect is more reminiscent of the Tegea heads.¹ The ears are small and sketchily worked, the execution of the right being inferior to that of the left.

In his treatment of the hair the artist has aimed at great variety.

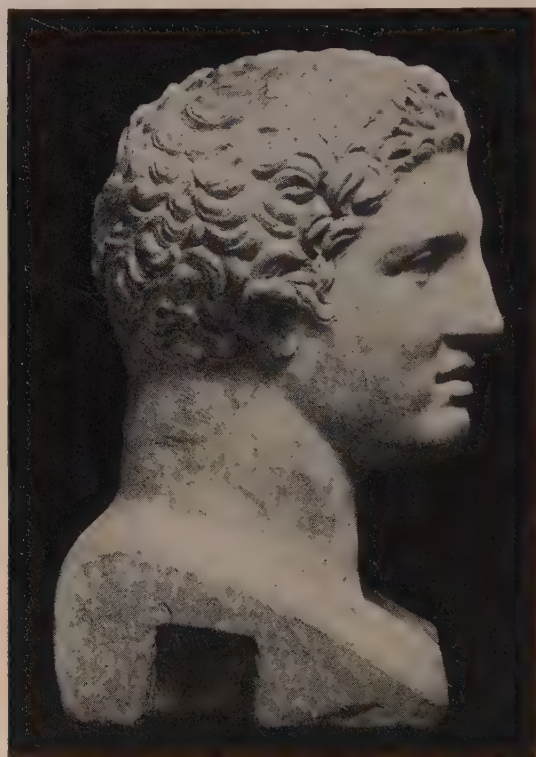


FIGURE 4. HERM IN THE ROYAL ONTARIO MUSEUM
OF ARCHAEOLOGY

Above the forehead appear several rows of little locks whose appearance suggests lambent flames turning this way and that. Behind these we see small compact masses of hair of quite conventional form; towards the back there are longer strands which at the crown itself assume the pattern of a rosette. Over the entire head, each single lock has been finely grooved in imitation of the bronze technique of the original. At the nape of the neck, the surface of the marble is carelessly smoothed off, with no attempt at modelling.

We need but place side by side a photograph of the Toronto herm

¹ See Brunn-Bruckmann, *op. cit.*, no. 44.

and of the head of the Antikythera bronze to appreciate their extraordinary similarity. The former is slightly the larger. The height of the ephebe is given as 1.94 m.; the height of the herm is stated by Dr. Harcum to be 0.41 m.¹ A complete figure constructed on the proportions of the marble would therefore be about 2 metres in height. From the point of view of pose—the head of each is turned to the right at precisely the same angle, and the right shoulder of



FIGURE 5. HERM IN THE ROYAL ONTARIO MUSEUM
OF ARCHAEOLOGY

each is higher than the left. To find this combination of features in a herm is in itself unusual. However, the head of the bronze figure is bent forward, while that of the herm is held bolt upright. This point will be dealt with later.

In spite of the rather greater degree of health and vigor manifested in the Toronto face, the close resemblance of the expression of the two is very evident. Particularly is this seen in the case of the eyes, though the bronze has, of course, admitted of a considerably more elaborate treatment. Each face exhibits the same intentness of

¹ Or, as stated, 16¼ in.

gaze and the same absorbed and slightly pathetic look. The hair of the Toronto head I have described in some detail. It is remarkable to observe how closely the fine points of the bronze are reproduced. Each clump of hair is grooved in imitation of the more plastic material, and we see in either case a few stray locks in front of the ears, several rows of "flame-locks" on the forehead, solidier masses further to the rear, and longish strands in the vicinity of the crown. It is true that the heads do not correspond lock for lock; but this we should not expect to find. The replica,¹ *e.g.*, of the Westmacott statue² that stands by its side in the British Museum shows almost



FIGURE 6. REAR AND FRONT VIEWS OF HERM IN THE ROYAL ONTARIO MUSEUM OF ARCHAEOLOGY

as many departures in this respect, and that too despite their common marble technique. So close, however, is the agreement between the Toronto and Athens heads that one may readily see where the artist has at certain points picked out hair masses of outstanding form, reproduced them faithfully, and then filled in the intervals with greater freedom.

Stylistically compared, the two heads manifest

their several elements of eclecticism in slightly varying degrees. The marble head is, as we have seen, frankly Lysippic in form, while the bronze is essentially Attic with a slight admixture of Argive longheadedness. The bar of Michael Angelo is more pronounced on the herm, and reproduces exactly that of the Apoxyomenos; the bar of the statue is diluted Praxitelean.³ The mouth of the former has already been described as Lysippic in detail and Scopaic in general effect; the mouth of the latter belongs to no particular school. With its slightly parted lips that droop at the ends, it may be described as a refined edition of the mouth of the so-called Hellenistic Ruler⁴ of the Terme Museum. The cheeks and chin of the herm are a little the fleshier. The eyes of both show a Lysippic keenness.

¹ See *J.H.S.*, XXXI, 1911, fig. 1.

² *Cat. of Sculp. in Brit. Mus.*, no. 1754.

³ The pure form may of course be studied in the Hermes of Olympia. See Gardiner, *Olympia*, 1925, fig. 59.

⁴ See Arndt-Bruckmann, *Gr. u. röm. Porträts*, Pls. 358-360. The feet and legs of this statue are placed very like those of the Antikytheran.

The stylistic points of divergence as between these two heads are thus comparatively slight. But the features which distinguish the herm—its virility and impressiveness and the closer adhesion to a particular school of art—are the very ones which would mark it as undoubtedly not a copy made directly from the bronze. If it belongs to the first century A.D., as Dr. Harcum thought,¹ the business of copying would have been out of the question, the bronze being already beneath the waves. That the statue is a copy of the herm is, of course, unthinkable. The only conclusion is that they have a common antecedent. To this the herm has the more closely adhered; the bronze has, somehow or other, become watered-down.

We may now revert to the little-noticed opinion of Bulle² and the recent pronouncement of Lawrence³ concerning the ephebe. The former regards the statue as a Roman copy of a fourth-century original, basing his conclusion largely on the stiff and mechanical treatment of the hair, and he compares it with the Farnese Heracles of Glycon at Naples.⁴ Lawrence thinks that the work was "brought up to date" towards the end of the first century B.C. By this he appears to mean what is commonly designated a process of adaptation. The existence, then, of this Toronto herm⁵ together with its distinguishing characteristics proves the essential truth of these theories, though both of our authorities err in placing the date of the original too far back, and in associating it too intimately with the school of Polycleitus.

A final and important point remains to be considered. The head of the bronze is bowed; the head of the herm is upright. To account for this discrepancy two explanations are possible. With the herm, the motive for inclining the head is altogether lost, and the copyist may have felt that the combined features of a neck rotated to the right, and at the same time bent forward for no reason that is apparent, would have produced a thoroughly awkward effect. This is a sufficiently good reason; but I feel that another suggestion is even more probable. Lysippic figures are noted for the erectness of their heads; Praxitelean heads show a regular tendency to droop. It is

¹ Harcum, *op. cit.*, p. 57.

² Bulle, *op. cit.*, p. 115.

³ Lawrence, *l.c.*

⁴ Brunn-Bruckmann, *op. cit.*, no. 285.

⁵ The Antikythera statue has been compared, in one way or another, with such works as the Lansdowne Heracles, the Scopaeic Meleager type, the Farnese Heracles, and the bronze athlete of Ephesus. To these I would add, as closer parallels, the Townley Heracles of the British Museum (No. 1732. The bust is modern and the head is somewhat restored); a youthful Heracles of the Richelieu Collection of the Louvre (No. 526); and the so-called Marcellus which was found at Pompeii and is now in the National Museum of Naples. The features of this last are thoroughly Praxitelean. The pose of the statue is also sometimes suggested in small bronzes.

quite possible, then, that the head of the original was upright. The Antikytheran artist, who was strongly imbued with the ideas of the Praxitelean school, would naturally have made the head to incline, if he were copying, as Lawrence thinks, somewhat freely. Doubtless many critics may have observed, more or less unconsciously, that the head sags more than is necessary, and the youth almost gives the impression of peering beneath his eyebrows. With the head in this position, the gaze ought likewise to be directed downwards, but from the position of the pupils in the eyes it is seen that the look is very slightly upwards. It is quite probable that the original statue held its head as does the Apoxyomenos or the seated Ares Ludovisi.¹

We have now reached a point in the investigation where we may attempt to reconstruct the history of the Antikytheran series. Shortly before the year B.C. 300, an artist of moderate attainments, of the school of Lysippus but influenced to a certain extent by Scopas, executed in bronze a work of more than life size. It may possibly have been of the proportions of the Agias which is 1.97 m. in height.² The motive of the statue was altogether trivial, as it represented a young man amusing himself with a bandelore.³ The work as a whole could not have been highly esteemed,⁴ and was apparently little copied. But the fine head of the figure presently attracted the attention of some Augustan artist, who reproduced it in the form of the terminal bust which we see in Toronto.

The relation of the statue in Athens to the original is more obscure. I hazard the conjecture that it is a copy of a copy. This seems to be the only view that will bear analysis. If it be true, the first copyist was probably influenced by Argive tradition, and altered a trifle the form of the head and possibly gave additional bulk to the torso. The later copyist, who may very possibly have belonged to the late first century, was thoroughly steeped in Praxitelean mannerisms, and to him we owe the later alterations—the retouching of the features of the face and the lowering of the head.

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¹ See Arndt-Amelung, *Phot. Einzel.*, nos. 832, 833.

² Though the head of the Agias is unusually small.

³ This is the belief of Ernest Gardner (*J.H.S.*, XLIII, 1923, pp. 139-143), and is almost certainly correct. The same conclusion has been reached independently by others.

It cannot be denied that there is a possibility that the motive of the original statue may have been much more exalted; the postulation of a Hermes Logios may not be irrational. But I deem it better not to open the question, as it is certain to lead to idle and useless speculation.

⁴ Cf. Bulle, *op. cit.*, p. 115; Lippold, *op. cit.*, p. 72.

A BIRTH CERTIFICATE OF THE YEAR 145 A.D.

THIS waxed tablet, numbered Mich. Pap. 4529, was found in January, 1927, by the Near East Expedition of the University of Michigan in its excavation of ancient Karanis (Kom Washim) in the Fayoum. It came from the house numbered B7 in the excavation plan, in which were found datable papyri of the second century A.D. Everything found there points to the same century, though the basement of the house may well have belonged to an earlier construction.

Professor Kelsey mentioned this tablet briefly in a paper read before the Classical Association of the Middle West and South on April 15, 1927. As he felt that he did not have the time nor the strength to work on it further, he turned it over to me even before he read his paper, and I made a hasty transcript of the text for his use. After his death there were found in his papers an almost complete transcript of the text from Mr. H. I. Bell and partial ones from Professor Kelsey himself, from Professor Westerman, and another, that was unsigned. I have been able to compare all of these with my own reading, but do not need to cite them to any extent as all readings are now practically certain.

The tablet consists of two boards, each $5\frac{1}{4}$ inches (135 mm.) wide and approximately 7 inches (180 mm.) long. One end of the block from which the tablet was made was not sawed true, so that the actual length is 7 inches (180 mm.) on one side and $7\frac{3}{8}$ inches (188 mm.) on the other. There can thus be no doubt that the two leaves of the tablet were sawed or split from the same tablet. The thickness of the boards varies between 3 and 4 mm. ($\frac{3}{16}$ of an inch). The inner surfaces of both were cut away to the depth of 1 mm. or more, but leaving a raised rim from 18 to 19 mm. ($\frac{3}{4}$ of an inch) wide about the edge of both. Lines had been scratched with the aid of a ruler and a sharp metal tool in order to show the part of the surface to be cut away. The work was done with a sharp instrument and very accurately except in two corners, where the ruled lines were not quite reached. The depth of the cut is rather uneven. The depressed surface was then covered with a very dark wax, which ran over the edges of the cut slightly on all sides. The wax-covered portions are not as uneven in shape as the boards, but neither one is a true rectangle. The smooth waxed portion of page 2 is 95 to 96 mm. ($3\frac{3}{4}$ inches) wide and 144 to 146 mm. ($5\frac{3}{4}$ inches) long. Page 2 has a writing surface 96 to 99 mm. wide and 143 to 146 mm. long.

There are three holes through the one long side of both boards and one in the middle of the opposite side. The remnants of the seals show that the binding cord went through the two holes in the middle

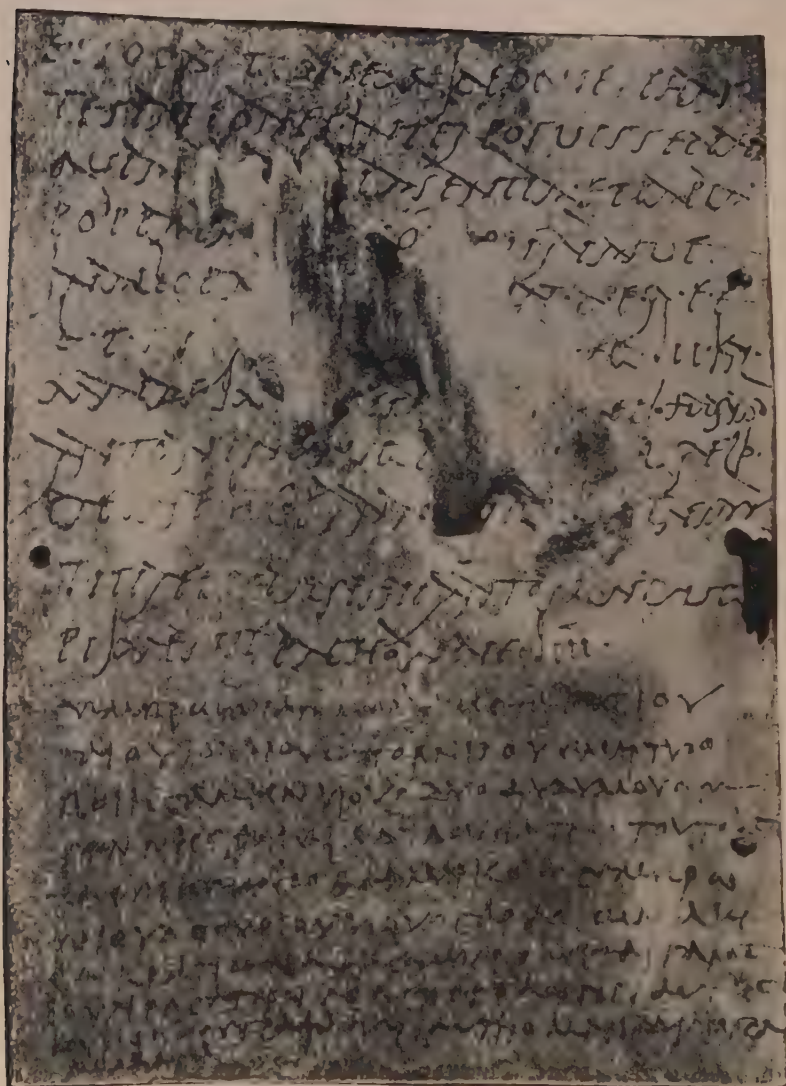


FIGURE 1. WAXED TABLET, PAGE 1; END OF TEXT ON WOOD

of each long side of the tablet. The other two holes must have served to tie the two leaves together before they were written on and sealed.

As usual in waxed tablets the writing on the inside wax is copied on

the wood on the outside. Numbering the pages of the tablet from 1 to 4 as if it were a two-leaved book, the document on the wax begins on page 2, the lines running the long way of the page, and is completed on page 3. Across the middle of page 4, where the binding cord ran, stood the row of seals, each followed to the right by the name of the witness. On the other half of page 4 the copy of the document began in lines at right angles with the names of the witnesses. After the writer had reached the end of the tablet with his copy, he tipped the tablet from him and continued the copy on page 1 with lines across the short way of the tablet as before. The writing was thus continuous from the end of page 4 to the nearest part of page 1. About two-thirds of this page was needed to complete the copy of the document and the rest was used for a summary of the contents in Greek.

I have stated the arrangement of the writing on the tablet thus fully, because there was evidently more than one system of writing documents on diptychs, and consequently misunderstanding has arisen. Bruns (*Fontes Juris Romani*, 7th Ed., p. 274) describes the diploma of a veteran as having the seals and the names of the seven witnesses with titles running lengthwise of the tablet across the seals on page 1, while the document itself stands on the inner pages 2 and 3, and the outer copy of the document on page 4. In *C.I.L.*, III, 2, fifty-seven military diplomas are published including No. 7 described in Bruns. All with one exception are stated to have the following order: page 1, outside copy of document; pp. 2 and 3, inside copy; p. 4, seals and names of witnesses. Military diploma No. 30 is reversed, probably by error, so that pages 1 and 4 change places, if the order of leaves is determined by the inner writing. Dessau, *Inscript. Lat. Select.* I, 1986, gives the same arrangement for a military diploma as Bruns, but the description of the same tablet in *C.I.L.* III, p. 844, X, 769, is different.

Among the Pompeian tablets, *C.I.L.*, IV, *Suppl.*, No. 50 is described as p. 1, blank; pp. 2 and 3, illegible; p. 4, at right of seals the names of witnesses and at the left, written at right angles to the names, are some five lines of the document. Nos. 138 and 139 had the same arrangement. Tablet No. 64, a mere fragment, seems to have had the seals with the names of the witnesses at the right, while the signature of the scribe stood alone at the left. If there was an outer copy it must have come on page 1. Tablet No. 4 has only the second leaf preserved. In this case the outer copy seems to have run over onto page 1. The other possible diptychs are very fragmentary.

Most of the Pompeian and Dacian tablets are triptychs with the writing in the following order: p. 1, blank; pp. 2 and 3, inner copy;

p. 4, seals, names of witnesses and beginning of outer copy; p. 5, end of outer copy, and p. 6, blank. This is the ideal form for such a document, in which both inner and outer copies are protected.

In publishing four waxed tablets of the Cairo Museum, Seymour de Ricci (*Nouv. Rev. hist. de droit.*, XXX, 1906, pp. 483 ff.) stated that seals, names of witnesses and the beginning of the outer copy came on page 1, while the rest of the outer copy was found on page 4, the inner copy on wax being on pages 2 and 3. Professor Kelsey (*Trans. Amer. Phil. Assn.*, LIV, 187 f.) implies the same arrangement for Pap. 766 of the Michigan Collection. This tablet I have re-examined, and the order of writing is exactly as on Mich. Pap. 4529. Also, through the kindness of Professor Dittmann, I have seen photographs of one of the tablets, Cairo No. 29807, which de Ricci published. It has the same order of writing as the Michigan tablets. The documents published in *Aegyptische Urkunden*, VII, Nos. 1690-1696, are nearly illegible on the exterior or fragmentary. No trustworthy evidence on the order of the writing is given.

Grenfell (*Bodleian Quarterly Record*, 1919, p. 259) published a well-preserved tablet in diptych form, of which the arrangement was as in the Michigan tablets. He cited two others in the Bodleian, both fragmentary, and claims the same order for them, though he recognizes that it is different from the order stated by Bruns.

If we admit errors in the statements in Bruns and by de Ricci, the evidence is fairly consistent. The seals and names of the witnesses belong on page 4, both in diptychs and triptychs. Diptychs were originally used only for short documents, the entire copy of which could go on page 1. When they were used for longer documents, as the birth certificates from Egypt, the form of the triptych was imitated, except that the copy of the document, begun on page 4, was completed on page 1. This evidently became a favorite system in Egypt, where a Greek summary was needed on the outside, so that the first page seldom sufficed, or rather could not be assumed in advance to be sufficient. We may add also that wood must have been relatively expensive in Egypt.

In Pompeii there was a different imitation of triptychs, in which very short documents were written on diptychs having the seals, names of witnesses, and the whole outer copy on page 4, while page 1 was left blank. This may have been the earliest form of diptychs, when used for documents.

The writing of Mich. Pap. 4529 has on the wax the characteristic forms found on other waxed tablets from Egypt and is very similar to the Dacian tablets. It is larger and somewhat cruder than the writing on Pap. 766 and on the other tablets from Egypt, with which

I have been able to compare it. It is well preserved and easily legible except for a couple of words.

The writing on the wood is better, and forms a very close parallel

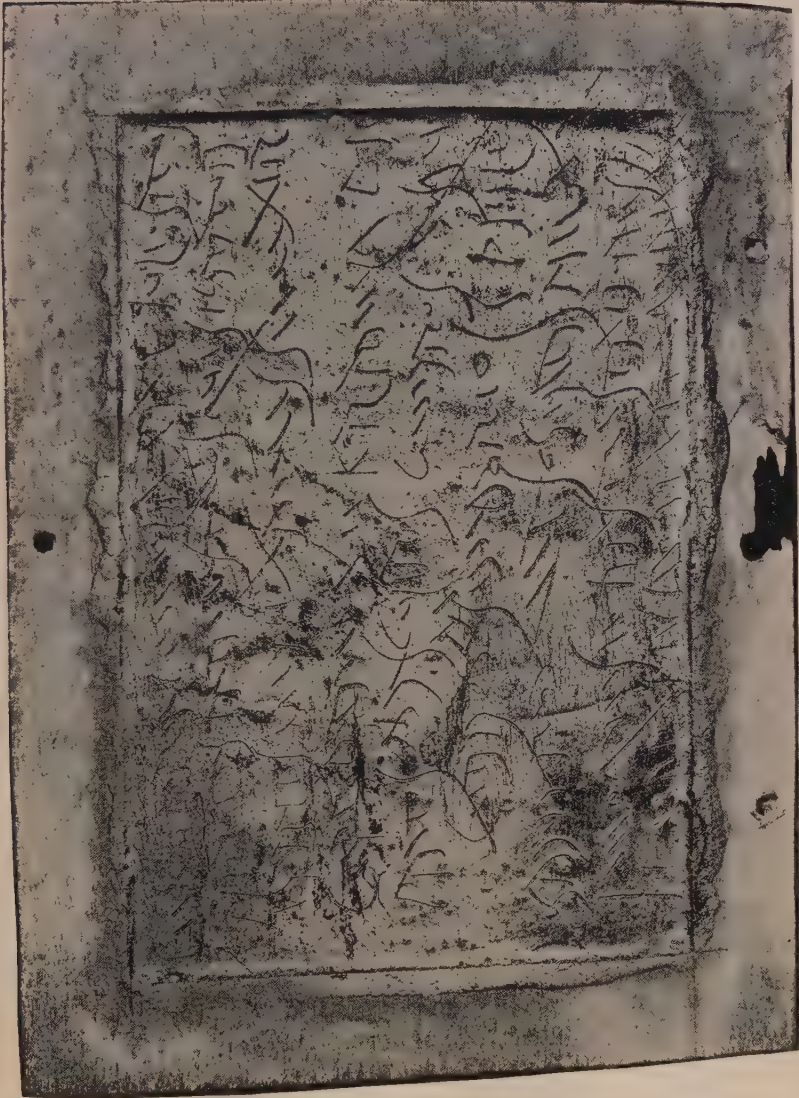


FIGURE 2. WAXED TABLET, PAGE 2; BEGINNING OF TEXT ON WAX

to that on the wood of Pap. 766. One page is, however, too dim for all the letters to be read with certainty, and the other is disfigured by a large hole in the center made by ants or worms. As C. Julius

Saturninus tells us that he wrote the document with his own hand, it is evident that he wrote better on wood than on wax. The other tablets compared, especially Mich. Pap. 766, were probably written by professional scribes. Not only did Saturninus write better on wood, but also he wrote the copy on wood with greater care. For that reason I print the text of the copy on wood preceded by the names of the witnesses in full, indicating letters somewhat doubtful by a dot below and enclosing in square brackets illegible letters as well as those that have entirely disappeared. The text on wax will follow:

Page 4

WITNESSES

- M Vibi Pollionis
M Octavi Sereni
L Aemili Maximi
L Caponi Saturnini
C Albuti Saturnini
C Vibievii Crassi
M Holconi Ampissi

TEXT ON WOOD

- 1 Sempronia Gemella t a C [Iuli]o
2 Saturnino testata e[st eos qui]
3 signaturi [e]rant s[e] en[i]xam [esse]
4 ex in[er]t]o patre X[II] Kal. [A]p[rel]
5 q. p. f. natos masculinos g[e]
6 minos eosqu[e] vocitari M M
7 Sempron[io]s Sp fil[io]s Sarapion[em]

Page 1

- 1 et Socratonem. ideoque [s]e has
2 testationes. interposuisse dixit
3 quia lex [Ae]lia Sentia. et Papia
4 Poppaea [spu]rio[s] spuriasve
5 in albo pr[ofiteri] ve[ritat]e d.e.r.e.e.
6 b.t.s s. a[ctum] Alex ad A[ug]. III. Kal.
7 Maias. im[p] Caes[ar]e T A[ug]elio Hadriano
8 Antonino Aug. p[ro]prio IIII M A[ug]urelio
9 Caesare. II. cos. anno [VI]II imp Caesaris
10 Titi Aeli Hadriani Antonini Aug
11 pii mense Pachon die IIII

GREEK SUMMARY.

- 1 Σεμπρωνια Γεμελλα μετα κυριου
2 Γαιου Ιουλιου Σατορνιλου εμαρτυρο

- 3 ποιησαμην υιους δυο δυδυμους γε
- 4 γεννησθαι εξ αδηλου πατρος τουτους
- 5 τε επικεκλησθαι Μαρκουσ Σεμπρω
- 6 υιους Σουριου υιους Σαραπιωνα κ(αι)
- 7 Σωκρατιωνα καθως προκειται Γαιος
- 8 Ιουλιος Σατορνιλος επεγραφην αυτης
- 9 κυριος κ(αι) εγραψα περι αυτης μη ιδυιασ γρα
- 10 μματα

Page 2

TEXT ON WAX

- 1 Sempronia Gemella. t. a. C. Iulio Satur
- 2 nino testata est eos qui signaturi
- 3 erant se enixam esse ex in
- 4 certo patre. XII Kal April q. p. f.
- 5 natos masculinos geminos eosque
- 6 vocetari M. ^M Sempronios Sp. filios
- 7 Sarapionem et Socratíonem
- 8 ideoque se has testationes in
- 9 terposuisse dixit quia lex

Page 3

- 1 Aelia Sentia et Papia Poppaea
- 2 spurios spuriasve in albo profiteri
- 3 vetat. d. e. r. e. e. b. t. s s.
- 4 actum Alex ad Aeg. III. K. Maias imp
- 5 Caesare T. Aelio Hadriano Antonino
- 6 Aug. pio IIII. M. Aurelio Caesare II cos.
- 7 anno VIII imp. Caesare T Aeli Hadriani
- 8 Antonini Aug pii mense Pachon
- 9 die . IIII.

NOTES ON TEXT

References are to lines on the wax. The scribe inserted dots after letters to indicate punctuation as well as abbreviation. Only those dots that are fairly certain have been printed.

Page 2

1. I have expanded the abbreviation *t(utore) a(uctore)* as the equivalent of *κυριος* of the Greek, and on the suggestion of Professor Dittmann, citing *Thesaurus*, II, 1195, l. 31 ff. In the abbreviation for Gaius the dot, which should have followed the *C*, was carelessly placed in the top of it.

Saturnino: the *u* is small, angular, and attached to the top of the preceding letter; it is a characteristic form for this hand.

4. *Aprēl* as the abbreviation for *Apriles* is read with certainty on the wax. It is illegible on the wood. The error *e* for *i* is common in inscriptions and manuscripts.
5. The expansion of the abbreviation *q(uae) p(roximae) f(uerunt)*, first made by A. S. Hunt, is certain; see *Trans. Amer. Phil. Assn.*, LIV, p. 191, and *Aegyptische Urkunden*, VII, p. 209.
6. *MM*: the second *M* is added above on the wax, but both are on the line on the wood. It is the common abbreviation for *Marci duo*; cf. Dessau, 1550, 4217, 5616, 5775, etc.

Page 3

1. *Poppaea*: the second *p* was corrected from *e*.
2. *spurios*: *p* looks much like an *o*, as it does not extend below the line, yet it is open at the bottom and *o* is regularly closed or open at the top.

albo: *a* was corrected from *d*.

profiteri: crowding and an attempted ligature made the last two letters obscure on the wax. The downward turn on the end of the second stroke of the *e* begins the *r*, which the following stroke must complete, while at the same time serving as an *i*. The great length of the stroke suggests this double use.

3. The expansion of the long abbreviation will be discussed below.
4. *Alex(andria) ad Aeg(yptum)*: this form of the name is common in inscriptions and tablets. We may also compare *Alexandria ad Caucasum*, Pliny, 6, 46.

Imp. is somewhat doubtful because of crowding at the end of the line. It cannot be read *im.*, because the last stroke is too upright for the third stroke of *m*, and it has a slight addition at the top. The ligature *IMP* was intended.

Maías: the second *a* is corrected from *s*.

- 4-6. In the copy on the wood these lines are partly obscured by the large hole, yet the spaces are exactly right to supply the text each time as on the wax.

The date of the fourth consulship of Antoninus Pius and the second of Marcus Aurelius is 145 A.D.

6. *Aurelio*: this is dim and carelessly written on the wax. The *u* is a small v-shaped letter attached to the *a*; cf. *Saturnino* in line 1 of the previous page. At the end the *i* is followed by a slanting stroke ending deep in the wax. The combination of the last two strokes looks a little like an *a*, but it cannot be so read, as the copy on the wood has the correct form [A]urelio. The scribe perhaps intended to make a big dot for the *o*, as he did several times, notably twice in line 7 of the

previous page. Here the slanting scratch formed the beginning of the dot and was not corrected.

8. *Pachon*: the Egyptian month was the same as the Greek Πανεμος, April 26 to May 25. The fourth day of Pachon was April 29 also given by III Kal. Maias.

NOTES ON GREEK SUMMARY

2. Σατορνιλου is practically certain, and is supported by Σατορνιλος of line 8. The use of Greek *o* for Latin *u* is common, but λ for *n* seems strange, as the scribe is writing his own name. But this Roman name was well known by the Greeks and was spelled in a variety of ways, Σατορνιλος predominating; cf. Meinersmann, *Die lat. Wörter u. Namen in d. gr. Papyri*, p. 96. The scribe seems to have yielded to what he knew was the more common Greek spelling. The slight indistinctness of the λ in the first case is due to ν having been written first, but the last stroke erased before the following *o* was written. Faint traces of that upright stroke are still discernible, and the following *o* is darker because the wood roughened by erasure took the ink more readily.
4. ἀθηλου: η is very indistinct, but the visible remains do not suggest any other letter.
6. σουριον is an error for σπουρον, and must be due to carelessness rather than to ignorance. Also on the wax *spurius* of page 2, line 2, looks much like *sourios*, as noted above. Here in line 6 on the wax the *p* does not resemble an *o* and so cannot have caused the error. Yet the fact is established that the scribe might make a *p* of that form. As noted below, he would naturally have made a rough draft of the declaration of the birth before copying it on the wax surface. Then the seals would be put on and the witnesses' names written. Next the copy of the document on the outside wood was made, for which the original draft must be used, even if the tablet had not been sealed before the outer copy was made, for it would be most inconvenient to make an exact copy of the document from the wax onto the wood, because it would be necessary to turn the tablet over with every phrase. The Greek summary would be written under the same conditions, so we may assume that it was derived from the original draft. This is the most natural explanation for the error under consideration. The fact that the scribe was copying is probably sufficient to explain an error even in so well known a word. At least there is no better

reason apparent, so it may be considered supporting evidence for the assumption that the document on the tablet was a copy made from a first draft.

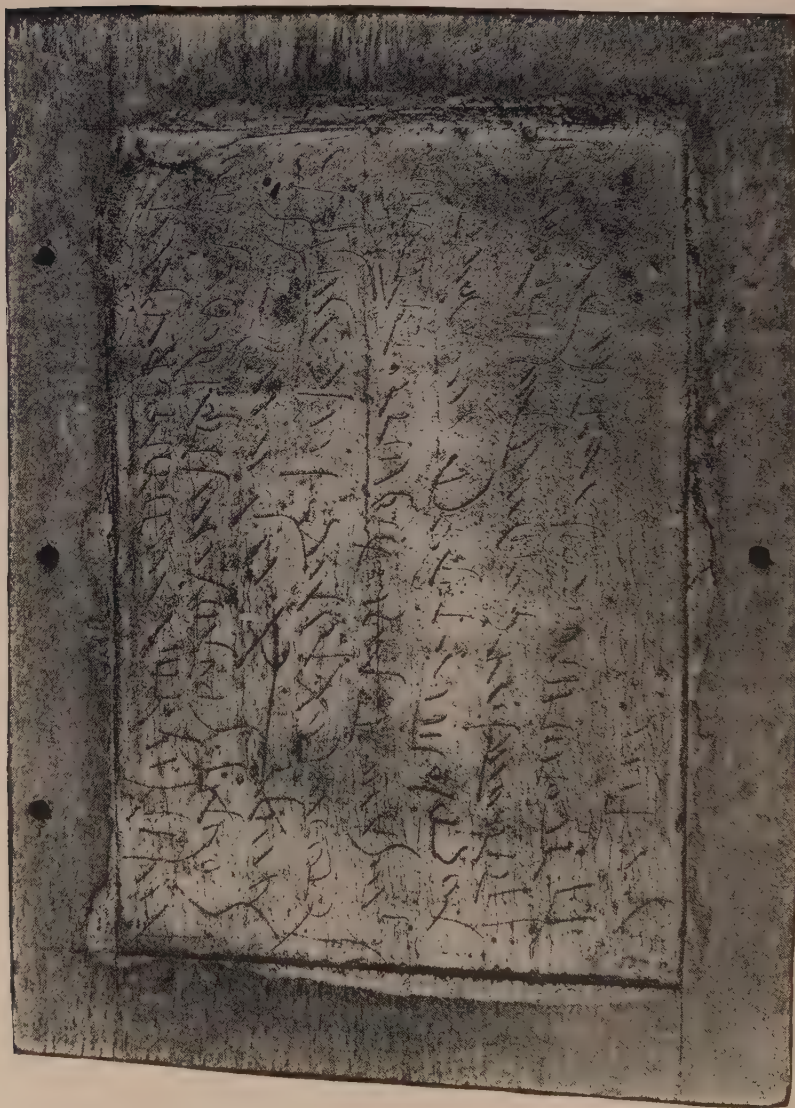


FIGURE 3. WAXED TABLET, PAGE 3; END OF TEXT ON WAX

9. *περι* is used for the usual *υπερ*. Preisigke cites no example of such a use in the papyri, and it probably indicates ignorance of Greek.

The ρ in $\gamma\rho\alpha\mu\mu\alpha\tau\alpha$ is very awkwardly written, but it can be seen that ρ was intended.

TRANSLATION OF THE DOCUMENT

Sempronia Gemella, under the guardianship of Gaius Julius Saturninus, called to witness those who were about to affix their seals, that on the twelfth day before the Kalends of April just past she brought forth twin sons from uncertain father, and that these are named Marcus Sempronius Sarapion and Marcus Sempronius Socraton, the sons of Spurius; and she said that she had employed these written testimonies for this reason, because the Aelian-Sentian and the Papian-Poppaeian laws forbid that illegitimate sons and daughters be registered in the public record. I, the above-mentioned guardian of her property, have sanctioned the copy concerning this matter. Dated at Alexandria on the coast of Egypt on the third day before the Kalends of May in the fourth consulship of the Emperor Titus Aelius Hadrian Antoninus Augustus Pius and the second of Marcus Aurelius Caesar, in the eighth year of the Emperor Caesar Titus Aelius Hadrian Antoninus Augustus Pius, on the fourth day of the month Pachon.

GREEK SUMMARY

I, Sempronia Gemella, with my guardian Gaius Julius Satornilus, gave testimony that twin sons were born from unknown father and that these are named Marcus Sempronius Sarapion and Marcus Sempronius Socraton, the sons of Sourius. I, Gaius Julius Satornilus, her guardian, have authorized the document as given above, and I wrote it for her, since she does not know letters.

THE NAMES OF THE WITNESSES

The names of the witnesses are in the genitive case as usual, and all written by the same hand, that of the scribe of the rest of the document. I have not found any of these names mentioned elsewhere. Vibius, Octavius, and Aemilius are well-known *gens* names and equally well known are all of the *cognomina*, except the last, Ampissus or Ampissa. I read the name Ampissi at first and Bell's transcript supports in part with $\text{Am} \dots \text{i}$, and I have so published it, though later I seemed to see traces of a curved stroke over the last letter. That could give only Ampissa, which would have to be used indeclinably, as there is no sign of a following *e*. The origin must be from Amphissa, or its eponymous hero Amphissus, the *h* being dropped in foreign pronunciation.

The fourth family name, Caponius, is not elsewhere attested. Its

derivation from *capo*, a capon, connects it with the farmyard, and so with the small farmer class from whom the Roman legionaries were in large measure enlisted in earlier times.

The fifth family name I have read Albuti, comparing Albucius Silus, a well-known rhetorician of the time of Augustus. The name is otherwise known. Aebutius is also a well-known name, but the apparent cross stroke, which might cause the second letter to be read *e*, seems only the end of the preceding *a*. Aebutii Saturnini are, however, noted in Africa by Dessau, 2446 and 3959. Bell read Arbuti, but corrected it to Asbuti. The latter is a possible reading, but I find no support for such a family name.

The sixth family name I read Vibievii, though Vibiedii is just possible. Bell supports with V . b . evii. Vibiedius is a family name found in inscriptions; cf. Dessau, 3150, 3545, 6124. This must be the name meant here, whether it had been corrupted in popular speech or one letter has been misread.

The seventh family name, Holconius, was previously known only from Pompeii, where the Holconii were the rebuilders of the large theater and the houses of M. Holconius, M. Holconius Celer, M. Holconius Priscus, and M. Holconius Rufus are mentioned in the Mau-Kelsey *Pompeii*; cf. also Dessau. The witness in our document has the same praenomen, and was perhaps a freedman of the family.

Before leaving the question of text I cannot refrain from noting the superiority of the text written on the wood in so far as it is preserved. This may be due partly to the fact that on the wood there was no necessity for crowding, as there was often on the wax. The differences are:

	wax	wood
2, 6	vocetari	vocitari
	M ^M	M M
3, 4	K.	Kal
6	Aureli	[A]urelio
7	Caesare	Caesaris
	T.	Titi

It is again evident that the copy on the wood could not have been made from that on the wax, but both doubtless came from the same original draft. The fact noted above that the scribe wrote less easily and naturally on wax is a sufficient explanation for the increase in errors, except those due to crowding.

A comparison of Mich. Pap. 766, a most carefully written tablet, shows a similar condition, though there is but one error, *Asprenat*, on the wax for the correct *Asprenate* on the wood.

I have also compared the Cairo tablet 29807 by the aid of the photographs, which is a more noteworthy example, the copy on the wax being written by a scribe, who did not know that Latin



FIGURE 4. WAXED TABLET, PAGE 4 WITNESSES AND TEXT ON WOOD

script well. In the majority of cases *e* is written for *i*, and also numerals are badly mangled in several cases. The copy on the wood is now almost illegible, but that on the wax is perfectly clear. The

previous publications seem to have been based mostly on the copy from the wood.

EXPANSION OF THE LONG ABBREVIATION

The abbreviation *d. e. r. e. e. b. t. s. s.* was first found by Grenfell in a diptych containing the record of the appointment of a tutor by the prefect of Egypt for a woman named Mevia Dionysarion (*Bodleian Quarterly Record*, 1919, p. 258 ff.) Grenfell considered that the tablet was the official authorization of the *tutor* by the prefect, in which case it might be only a copy of the record kept in the office; cf. *Pap. Oxy.*, XII, 1466. He also noted that in *Pap. Oxy.*, IV, 720, a similar appointment of a guardian seemed to be the original request endorsed by the prefect in person. He was inclined to think that the abbreviation contained an official guarantee of the accuracy of the main text as copied from the official record. Though recognizing that *d. e. r.* might stand for *de ea re*, as found in the *Lex Rubria* (Bruns, *Fontes Juris Romani*, p. 161, he here favored *d(escriptum) e(t) r(ecognitum) e(x)*, but did not venture beyond that point though calling attention to the possibilities, *e(xempla)*, *t(abula)*, and *s(upra) s(criptus)*.

This tablet was at once discussed by Mitteis in *Zeit. d. Savigny Stift. Röm. Abt.*, 40, p. 358 ff., who supported Grenfell, completing the interpretation thus: *d(escriptum) e(t) r(ecognitum) e(x) e(xemplis) b(inis) t(abulae) s(upra) s(criptae)*, though he expressed grave doubts about his addition.

E. Cuq (*Acad. d. Ins. et Bell. Lett. Compt. Rend. d. Seances*, 1920, p. 40 ff.)¹ handled the tablet more fully. He noted that the woman requesting the guardianship signed through a substitute, but that the expected signature of the *tutor*, as well as of the prefect, was lacking. He called this extreme abbreviation, and still thought the document an official copy from the public record. He accordingly followed Grenfell in the expansion of the abbreviation, but completed it, *d(escriptum) e(t) r(ecognitum) e(x) e(xemplo) b(revi) t(abulae) s(upra) s(criptae)*. The *exemplum brevi* or *breviarium* was explained as the copy of the official record. A facsimile of the tablet appears in *New Pal. Soc.*, Ser. II, Part V, No. 100, but without complete expansion of the abbreviation.

In spite of this unanimity that whole attempt at expansion must be abandoned. In our document the abbreviation must have the same force as in the Oxford diptych. Yet here it is expressly stated that the document was issued because it was not permitted to enter the names of the children in the official record. This is not a copy of

¹ This reference was given me by Professor Dittmann.

the register, but an official document deriving its legal value from the authorization of the guardian and the attestation of the seven witnesses. Our diptych registers the birth of illegitimate children, the Oxford document records the naming of a guardian for a woman, a *civis Romana*. What have the two documents in common, that calls for the use of this long abbreviation, which must have been a regular and well-known legal formula? First, it is certain that each document deals with a woman, who has a *tutor*. We know that every legal act of a woman *in tutela* had to be validated by her *tutor*. This would apply perfectly to the Michigan document, but not to the Oxford one, if it is a copy of the original act of appointment of the guardian. *Pap. Oxy.*, XII, 1466, which is such a copy, has a reference to the volume and sheet of the public record. The similar document, *Pap. Oxy.*, IV, 720, is shown by the different hands to be the original appointment signed by the prefect in person. We find no sign that it was ever entered in the public records. Therefore such registration was not necessary for the legal validity of the appointment. Both Oxyrhynchus documents are couched in the first person, one representing the actual appointment, the other a copy of the same. The Oxford diptych is couched in the third person and contains no reference to volume or sheet. Therefore it is neither the original appointment of the guardian nor a copy of one. It is merely a statement of fact attested by seven witnesses. Yet it was prepared as a legal document with two copies, inner and outer, and sealed by the witnesses. This would be the natural way of replacing such a document as *Pap. Oxy.*, IV, 720, which had not been entered in the register, if it were lost or destroyed.

For a woman *in tutela* it was necessary to have the validation or authorization by the *tutor* of every legal act. That must be hidden in the abbreviation of the Oxford as well as of the Michigan diptych. Now in the Michigan document the Greek summary contains at this point the following: *καθως προκειται Γαιος Ιουλιος Σατορνιλος επεγραφην αυτης κυριος*. This is the authorization by the *tutor* and is inserted in the Greek summary also probably because the *tutor* wrote the whole document himself, as he states in the following sentence.

We return then to Grenfell's first suggestion, *d(e) e(a) r(e)*, which is a fair equivalent of *καθως προκειται*, and at the end of the abbreviation explain *t. s. s.* as *t(utor) s(upra) s(criptus)*, replacing thus his name and the title *κυριος* of the Greek summary. Furthermore we know that *επεγραφην* is the technical word used in the validation of documents by a *κυριος*; see the examples cited from the papyri in Preisigke, *Wörterbuch*, p. 548; *Fachwörter*, p. 83, and in *Archiv*,

IV, 89. Liddell and Scott hint at such a usage by explaining οἱ ἐπιγεγραμμένοι as "the parties who had endorsed the συνθήκαι," but this use of the word was hardly noticed before the study of Greek documents from Egypt. One of the first examples, *Pap. Oxy.*, II, 51, 32, has been often misinterpreted. The phrase in question should be translated "I, [Sarapi]on the son of Sarapion, her guardian, have given sanction, and I wrote in her behalf as she does not know letters."

In Latin there are many expressions for validation or authorization. Most common are *ratum facere* (*efficere*), *habere*, *ducere*, none of which seem possible here as the letter *r* is needed for *d(e) e(a) r(e)*. The form *επεγραφην* in the Greek shows that the verb was in the first person and presumably in the perfect tense. We may therefore suggest *e(xhibui)*, *e(didi)*, or *e(xscripsi)*. I prefer the last because of the analogy of the Greek and from the fact that the making of an official copy is implied in the form of many ancient documents. This idea of official copies is very plainly stated in Cicero, *Verr.*, 2.2.77, 189, *tabulas in foro summa hominum frequentia exscripsi*, for below he adds, *haec recognita et conlata et ab hominibus honestissimis obsignata sunt*. Plautus, *Rudens*, 21, *bonos in aliis tabulis exscriptos habet*, is also to be noted. In both cases there is the association with tablets and with legal language and the implication of careful copying or writing. This usage could easily have been extended from legal copies to all legal documents, in which naturally a rough draft would be made first and after all changes and corrections had been made, it would be copied as the official document. I have used *exscripsi* in expanding a different abbreviation in *Classical Philology*, 22, p. 410, where the case was much less clear. I consider this a strong confirmation, as in both cases the making of an official copy is implied in the form.

The Greek summary on the outside of the Oxford diptych is also helpful. There one reads Μηνια Διονυσarion αιτησαμην κυριον επιγραφομενον Ιουλιον Αλεξανδρον ως προκειται. This should be interpreted: "I, Mevia Dionysarion, asked for Julius Alexander as my guardian," the one validating the above statement. This is followed by the declaration of Gaius Julius Hercules that he wrote for the woman, who did not know letters. The expression ως προκειται corresponds to καθώς προκειται of the Michigan tablet, and επιγραφομενον in agreement with the name of the guardian matches επιγραφην, which is used in the first person by the guardian in the Michigan document. This extreme condensation is found also in the first part of the Greek summary in the Oxford document. We may note also that this reference to the authorization by the *tutor* is omitted in the Greek title on the outside of the tablet.

There are two letters left of the abbreviation, *e. b.* My first thought was *e(t)* and another verb, as legal phraseology is often overexact, but the only verb beginning with *b* that would pass at all is *b(reviavi)*, which does not seem in point here, as we have shown that neither of the documents can be a copy or abstract from the official records. All compounds of *bene* are excluded as legal Latin treats them as two words.

The other alternative is to consider that the two letters contain a description of the guardian. In the Greek summary *αυτης* is added to *κυριος*, which suggests *e(ius)*, but I find nothing to support any additional word, except that the Greek summary is confessedly a shortening of the Latin document throughout. An early guess was *e(ius) b(onorum)*, and I have returned to that because of the lack of any more plausible suggestion. This designation of a *tutor* seems justified by *Digest*, 26, 2, 4, *quasi in rem potius quam in personam tutorem dare videatur*. Examples of a genitive of a word meaning property with *tutor* are not rare; cf. *Digest*, 26, 2, 15, *tutor . . . rei Africanae*; 26, 5, 27, *rerum . . . provincialium tutorem*. To these Professor Dittmann has added *tutor opum . . . largitor bonorum* from Prudentius, *Contra Symm.*, 2, 435, and *bona tueri*, Ulpian in *Digest*, 26, 4, 1; *Cod. Theodos.*, 9, 43, 1, 2. *Bonorum tutor* is not cited in the apparatus of the *Thesaurus*, yet on the analogy of the evidence just cited it may be considered as possible. The whole abbreviation is therefore expanded, *d(e) e(a) r(e) e(xscripsi) e(ius) b(onorum) t(utor) s(upra) s(criptus)*.

The importance of our document lies more in its implications than in its actual subject matter. First we note that the Aelian-Sentian and Papian-Poppaeian laws forbade the registration of illegitimate children in the public record. The Papian-Poppaeian law of 9 A.D. was passed to strengthen and extend the *lex Julia de maritandis ordinibus* of 3 A.D., which was the continuation of the *lex Julia de adulteriis* of 18 B.C.

The *lex Aelia-Sentia* of 4 A.D. contained regulations restricting manumissions, but with the aim of preventing undue increase in Roman citizens. It is easy to see why both of these laws should forbid the registration of illegitimate children, but the law calling for the registration of children of Roman citizens must have preceded both of these. It seems most natural to refer it to the *lex Julia* of 3 A.D., or even of 18 B.C. Scholars have previously cited the passage in the life of Marcus Aurelius, chapter 9 in the *Scriptores Historiae Augustae*, for the order that the births of Roman citizens should be registered within 30 days. The last sentence of that reference has however not been given due weight: "*atque hanc totam legem de*

adsertionibus firmavit aliasque de mensariis et auctionibus tulit." It is thus evident that in the first case Marcus Aurelius was strengthening a well-known law, while the other two are treated as independent edicts. Apparently the places of registry and the limit of time had been established before his reign, for the birth tablets from earlier reigns confirm these requirements.

Our tablet implies that the Aelian-Sentian law was the first to forbid the registration of illegitimate children, but that law did not deal directly with the marriage question. It forbade the manumission of certain classes of slaves with the purpose of preventing those unfit from becoming Roman citizens. Two of the classes restricted, slaves under thirty and those freed by masters under twenty, might well include women freed for the purpose of marriage. Manifestly the law could not prevent a master from allowing slaves to live in a free state whatever their legal status. So the *lex Junia Norbana* of 19 A.D. made such freed slaves *Latini*. Even before this time they could not have exercised the rights of Roman citizenship, as the Aelian-Sentian law prevented by denying the right to free, unless certain conditions were complied with. The marriage of such illegally freed women with Roman citizens was impossible. As there was no marriage, the children were illegitimate and therefore were denied registration. We now for the first time learn that this full implication of the restrictions was contained in the law, which must have denied the legality of the marriage as well as refused registration of births.

In lines 3 and 4 of page 2 of the tablet we learn that the twins were born *ex incerto patre* and in accordance with this statement *Spurii filios* is inserted in their names just below. These expressions mean that the children were illegitimate and not necessarily that the father was unknown; cf. Gaius, *Inst.*, 1, 64; *Ergo si quis nefarias atque incestas nuptias contraxerit, neque uxorem habere videtur, neque liberos; itaque hi, qui ex eo coitu nascuntur, matrem quidem habere videntur, patrem vero non utique, nec ob id in potestate eius sunt, sed sunt quales ii, quos mater vulgo concepit; nam et hi patrem habere non intelleguntur, cum is etiam incertus sit; unde solent spurii filii appellari vel a Graeca voce quasi σποραδην concepti, vel quasi sine patre filii.*

This legal interpretation is important when we consider the reasons for the certificate of birth and especially for the meaning of the word *interposuisse* in line 9 of page 2. The explanation given in a parallel declaration (*Aegyptische Urkunden*, VII, p. 205) certainly does not apply to all cases. Here there can be no question of a preliminary registration nor even of using an intermediary. Registration in the official records was forbidden because of illegitimacy,

and this is a substitute. The verb *interposuisse* tells us that fact only.

Sempronia Gemella, who had this certificate of the birth of twin sons made out, was a freed woman. By a *lex Claudia* the agnatic *tutela* of women was abolished; thus the *tutela perpetua* of freeborn women disappeared. For freedwomen, however, it continued for a long time; cf. Gaius, *Inst.*, 1, 115; 171; Ulpian, XI, 8. Naturally the freedwoman took as *tutor* her former master, but in case of his death or incapacity the law provided for the appointment of another; cf. Ulpian, XI, 18; Justinian, *Inst.*, 1, 20, 3; *Digest*, 26, 5, 1.

Sempronia Gemella as a slave had the name Gemella, presumably because she was a twin, so the tendency to twins was inherited. She took the *gens* name of her former master, Sempronius. But in this document her *tutor* is Gaius Julius Saturninus. Therefore her first guardian was dead or otherwise hindered from acting, and she had been given another *tutor* by the *praeses* of the province or by some magistrate at his command. According to the passage from the *Institutes* just cited, the method of appointment varied with the amount of wealth possessed by the *pupilla*.

There are various reasons why the woman should wish the birth of the children legally attested. An illegitimate child followed the status of the mother, and was the nearest heir for inheritance both ways: Paulus, IV, 10, 1; *Inst.*, 3, 4, 3; 3, 3, 7; *Digest*, 38, 17, 2.

A freedwoman, *Latina Juniana*, attained Roman citizenship after bearing children three times: cf. Ulpian, 3, 1: *Latini ius Quiritium consequuntur his modis . . . praeterea ex senatus consulto mulier quae sit ter enixa*. Dead children counted with the living: Paulus, IV, 9, 9. So, also, an illegitimate child; *Inst.*, 3, 3, *De senatus consulto Tertulliano*; especially 3, 3, 7. Further a freedwoman attained the *ius liberorum* if she had borne children four times: Paulus, IV, 9, 1; 7; and this freed her from *tutela legitima*; Gaius, 1, 145; 194; 3, 44; Ulpian, 2, 9, 3.

We do not need to take up the possibilities of legitimatizing an invalid marriage, if contracted in ignorance, nor of a Latin attaining Roman citizenship by marriage either with a Latin or a Roman, if thereafter he had a son one year of age. There is nothing in this document to suggest the immediate hope of Roman citizenship or even of marriage.

A choice between the above reasons for registration is perhaps not possible, and all may have had weight, but further consideration of the condition in which the freedwoman was living may assist our understanding. The first assumption would naturally be that she was a woman of the camp without permanent cohabitation with any

man. In that case the designation of the children as *ex incerto patre* was literally true. Against this may be urged the distinguished sounding name of the guardian, C. Julius Saturninus. A certain T. Julius Titi filius trib. Fabia Saturninus was a *procurator Augustorum et Faustinae* and later collector of revenues under the Antonines; Dessau, 1382-1384, 1859. He was of equestrian rank. Perhaps of the same family was L. Julius C. f. Fab(ia) Saturninus, who as heir joined in erecting a tombstone in Mauretania to a retired officer of the *classis Aug. Alexandrinae*. A connection of the family with the military force in Egypt is thus suggested. There was a C. Julius Saturninus in the army in Numidia in 253 A.D., and C. Julius C. f. Saturninus Chius retired as a centurion in Egypt in 83 A.D. (Dessau, 1996). The latter might be an ancestor of the Saturninus of our document, but if so, the connection with the equestrian family must be abandoned. Whatever the rank or family of our Saturninus he was doubtless associated with one of the legions in the Roman camp at Alexandria, for all seven of the witnesses have Roman names also. It is not likely that such a group of friends or acquaintances could be found at Alexandria except in the Roman camp. Neither is it probable that they would witness a document for a camp prostitute nor their most distinguished member act as her guardian even though she possessed property.

The other alternative is that she was a concubine. While this was a permanent status not dishonorable to a freedwoman, her children took her name and rank and in legal documents were designated as *Spurii filii*, though unofficially the father might call them *fili naturales* or *filiastri*; cf. P. Meyer, *Der Römische Konkubinatus*, p. 34-51. When the military reforms of Augustus forbade the marriage of soldiers, illegal associations took its place. Such seems to me to have been the connection between C. Julius Saturninus and Sempronia Gemella. To be sure concubinage as well as marriage was forbidden between guardian and ward, but this rule did not appear in the law until the second century, and even then did not apply, if the association came before the guardianship, or if the woman was twenty-six years of age; cf. Buckland, *A Textbook of Roman Law*, p. 129; Meyer, p. 61.

Saturninus accepted the guardianship of Sempronia Gemella because she was his mistress. Both are interested in having a legal record of the birth of their children, as this improves the status and financial possibilities of both concubine and offspring. Any less honorable position of the woman in the camp would make the procuring of such a document as well as of such a guardian most difficult.

In a parallel document (*Aegyptische Urkunden*, VII, No. 1690) a

common soldier announces the birth of a daughter from Arsus, daughter of Lucius, his *hospita*. I have referred above to the interpretation of *interposuisse* in this document. It is a Latin birth record and so a substitute for the regular Latin birth certificate, which also is always on a wax tablet. The ultimate aim seems to have been in general the securing of Roman citizenship or defending it in the future. I see no occasion for connecting them with the *epicrisis*, or with the registration of non-Romans with the prefect or other official, which might be made at any time before the census, or with the records of entry among the *ephebi* of a city with special rights as Alexandria. The form of such records is quite different and they are in Greek; cf. Bell, *Jour. of Egypt. Arch.*, XII, 245 f.

Tablet No. 1690 was a Latin document to be preserved in the family. When Epimachus secured his discharge after twenty-five years of service his wife and children would become Roman citizens also.

Further comparison of these parallel documents suggests some slight emendations in No. 1690, which is not well preserved. Of the second line little was read by the editors, though they felt sure that *professus est* must have stood there. They indicate space for 29 letters. Wilchen, *Archiv*, VIII, p. 293, supplied the *lacuna* "[*professus est Philadelphiae apud*]" because of the following *idcirco*. His reasoning was correct, but the Michigan document offers a formula "*testatus est eos, qui signaturi erant*," which will just fill the space. Also this will imply that on the outside of the missing tablet stood the names and seals of the seven witnesses. These would occupy fully half of the surface, while the remainder would be large enough to contain the beginning of the copy of the document not found on the outside of the half of the tablet that is preserved. In that case the arrangement of seals, names of witnesses, and copy must have been the same as on the Michigan tablets, which have been discussed above.

In line 6 the editors expand the abbreviation "*propter districtionem mil(itum)*" and explain "wegen der Inanspruchnahme der Soldaten." But we have seen that there was no possibility of registration of the birth in Alexandria by the soldier, even if he had been able to go there. This phrase takes the place of the reference to the Aelian-Sentian law in the Michigan tablet. Therefore I should expand the abbreviation *propter districtionem mil(itiae)* and interpret "on account of the limitations imposed by military service." This would mean the prohibition of marriage. Wilchen, *Archiv*, VIII, p. 293, seems to have the same view, for he supplies *propter districtionem mil(itarem)*.

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COLOR AT CORINTH

AMONG the more notable discoveries made in the excavations in the theatre district of Corinth in 1926 were several pieces of marble sculpture on which red color was preserved to a greater or less extent.¹ This is especially noticeable in the case of a colossal male figure whose cloak is covered over a large area with a pigment of a light red color shading to pink. These objects were lying at a depth of twenty-five to thirty feet below the surface of the ground and were surrounded by very damp earth, but in spite of this subjection to moisture for many centuries the color still remains. It is not necessary for our present purpose to discuss the arguments for the age of these sculptures, but it is my opinion that they belong to the Greek rather than to the Roman period and that they may be tentatively dated in the fourth or the third century B.C. Very little marble sculpture of this time has been found with its colors preserved, and it is an interesting phenomenon that this should be the case at Corinth where the burial conditions seem particularly unfavorable because of the dampness of the soil due to the natural drainage from the acropolis. Is it possible that the preservation of the color at Corinth may be explained by the fact that the Corinthians employed an unusually good quality of paint, or is the preservation purely the result of chance?

Some information on the nature of color used by the Corinthians is furnished by another discovery made at Corinth in the same campaign. In the sanctuary of Athena Chalinitis, which adjoins the theatre, a rude pot was found at a depth of 5.25 m. This is a vessel of coarse clay, and is of bowl-shape with only one handle. It does not resemble any Greek pottery of Corinth, and, moreover, the evidence secured at the time of its discovery is against an early date. Objects so far found in the area of the Athena sanctuary do not antedate the eighth century B.C., and those lying in the vicinity of the pot belong to the end of the fifth and to the beginning of the fourth century. As, also, the clay of the vase is not of the local Corinthian type, the conclusion seems to be inevitable that this is a product that has been imported from some place where such rude ware was still being manufactured in the fifth and fourth centuries.²

¹ See *A.J.A.*, XXX, 1926, pp. 456, 462.

² A crude one-handled pot of somewhat similar shape and clay was found at Sardis in association with characteristic fine Lydian ware that dates from the beginning of the sixth century, B.C. Compare the vase found by D. M. Robinson at Sisma, *A.J.A.*, xxxi, 1927, p. 46, Fig. 33.

Further light on this problem is supplied by the contents of the vase, which consisted of a small quantity of pigment of a light red color. The lumps of this matter are composed of crystals of columnar shape, and when the mass is crushed with a pestle the color changes to a reddish orange. A specimen of this pigment has been chemically analyzed by Professor William Foster of the Department of Chemistry of Princeton University, who finds that it reacts perfectly to the usual tests which prove that it is sulphide of arsenic, chemically expressed as either As S or $\text{As}_2 \text{S}_2$. This matter is known by mineralogists as realgar from the Arabic word *rehj-al-ghar*, meaning powder of the cave or mine. Our specimen agrees exactly in appearance with the description of realgar given by Henry Watts in his *Dictionary of Chemistry*, I, p. 386, as "crystallized in oblique rhombic prisms of the monoclinic system, having an orange-yellow or aurora-red colour, resinous lustre, and more or less translucent: streak varying from orange-red to aurora-red; fracture conchoidal, uneven; sectile." On the evidence of descriptions given in ancient writers realgar has with reasonable certainty long been equated with the Greek *σανδαράκη* and Latin sandaraca. Theophrastos, *De Lapidibus*, 50, says that this is a red color used by painters. Pliny, *Nat. Hist.*, XXXV, 39, states, on the authority of Juba, that it is found on the Island, Topaz, in the Red Sea. According to Vitruvius, *De Architect.*, VII, 7, 5, it was found in many places, but the best quality came from Pontus. Approximately the same source is, also, given by Strabo, *Geog.*, XII, p. 562, who says that it was mined in shafts near the city of Pompeiopolis, Paphlagonia, which is not far from Sinope. Only slaves and condemned criminals were used as laborers in the mines because of the hazardous nature of the working conditions due to poisonous vapors rising from the earth. The mortality from this cause among the workmen frequently necessitated the complete cessation of operations. As Blümner points out,¹ the ill effects were probably produced not by vapors but by the constant inhalation of fine poisonous dust. The poisonous nature of sandarake is attested by ancient authors, as, for example, Aristotle, who says in *De Animalium Historia*, VIII, 604b, that horses and other beasts are killed by this drug. Galen, *Geoponica*, XIII, 9, 3, recommends that it be used in a mixture with butter and a sweet substance against scorpions, just as gardeners now use arsenic mixed with something sweet on bread to destroy cutworms in the garden. Theophrastos, *De Lapidibus*, 40, specifically describes the material as dust, *κόκκια*, in contradis-

¹ *Technologie und Terminologie der Gewerbe und Künste bei Griechen und Römern*, IV, p. 484.

tion to earth or sand. The constant inhalation of dust in the process of mining such an arsenic compound as our color is revealed to be might possibly have the deleterious effects described by Strabo.

Sinope and its neighborhood had close commercial relations with Greece, as D. M. Robinson has emphasized in his study of Sinope,¹ and that port would have served as a shipping point for the mineral product of the inland mountain mines as well as for the red earth for which Sinope was famous. Arrian, in his *Periplus* of the Black Sea, 13, locates a harbor for small ships, named Sandarake, on the coast of Bithynia between the Oxinas River and Krenides. This is much farther distant from the mines than is Sinope, but commercial rivalry between the producers of Sinopis and of sandarake may have forced the latter to seek their own harbor for export. The name, in any case, suggests some association with the mines. Sandarake, because of the hazards and difficulties of production, must have been a comparatively rare and expensive substance. Such an inference, at least, is justified from Pliny's statement, *Nat. Hist.*, XXXV, 39, that it was found in an island of the Red Sea but was not imported. He then describes an artificial substitute which went by the same name and was sold for five asses the pound. The discovery of this imitation was made by accident when white lead was burned in a fire at the Peiraeus, according to Pliny, *Nat. Hist.*, XXXV, 38.² Pliny further adds that the first person to use this synthetic color was Nikias, the artist who painted some of the marbles for Praxiteles, *ibid.*, XXXV, 133.

The conclusion that I draw from this little study is that our color, sandarake, at Corinth was probably imported from the mine in the mountains southwest of Sinope. The rude pot may be explained as a cheap container made locally at the mine for the transport of the pigment. At Corinth the red powder in its original package was dedicated as an appropriate and valuable offering to the Goddess Athena. Is it too fanciful to conjecture that perhaps the drapery of the Hermes of Praxiteles has lost its color because synthetic paint was used, whereas the mineral color is still well preserved on the cloak of the statue at Corinth?

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¹ *A.J.P.*, XXVII, 1906, pp. 135 ff.

² See also Vitruvius, VII, 12, 2.

BUTTONS AND THEIR USE ON GREEK GARMENTS

THE scarcity of fibulae of proven Greek provenance has suggested the possibility of some other means employed by the Greeks for fastening their costumes. That fibulae were always used in Italy is evident from the great numbers found there beginning in the Bronze Age and lasting well into the Early Christian era, but this is not the case in Greece. The earliest known examples from Greece are of Mycenaean date¹ and of the simple safety-pin type with a single twist of wire for the spring. This variety is followed by the spectacle brooch. Homer gives evidence of the use of the twisted fibula in speaking of the peplos which Antinoos gave to Penelope with its twelve golden fibulae provided with κληίδες εὐγναμπτοι.²

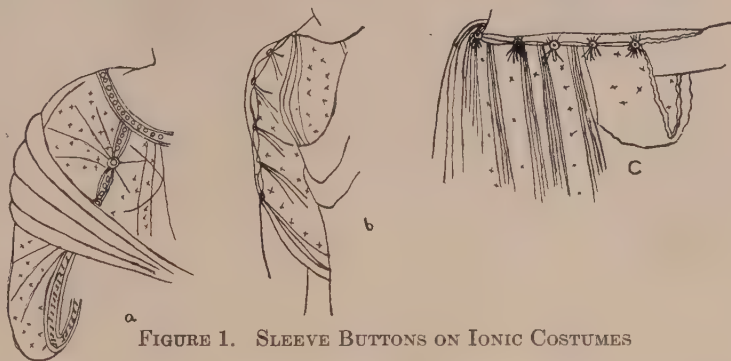


FIGURE 1. SLEEVE BUTTONS ON IONIC COSTUMES

In other literary sources it is more difficult to determine the type of fastening intended since in neither Greek nor Latin is there a word which is restricted in meaning to "pin" in the sense of the modern safety-pin. In Latin, fibula "signifies that which serves to fasten two things together—a buckle, a clasp, a pin, etc."³ Buttons or even strings⁴ might thus be included. In Greek περόνη means more definitely something with a point for piercing or pinning, but also refers to the brooch or clasp itself.⁵ From that inclusive meaning it seems possible that περόνη may have come to be applied to anything which took the place of a brooch, such as a button. This is particularly likely as there seems to be no Greek word for button.

¹ Daremberg et Saglio, *Dictionnaire des Antiquités*, fibula, p. 2004, fig. 2977.

² *Od.*, XVIII, 293.

³ Harper's *Latin Dictionary*, fibula.

⁴ For the use of strings to tie two sides of a sleeve together see below, p. 339.

⁵ Liddell and Scott, *Greek Lexicon*, περόνη.

It is not fair to argue from the absence of a special word that the Greeks did not use buttons.

The word "fibula" in modern times, at least, is used to designate a clasp of which the pin of metal is an essential element,¹ and archaeologists generally have used the word in this limited sense when discussing the fastenings of Greek garments. It has been assumed that such fibulae were the invariable rule throughout Greek times for the Doric and Ionic chitons alike. Dickins, in his discussion of the costumes of the Archaic Maidens,² speaks of sleeves fastened with brooches or sewn. Lechat, in an article on archaic statues from the Acropolis,³ says the two borders of the sleeve were fastened at regular intervals by fibulae in the form of small round buttons. Reinach agrees with Lechat.⁴ Heuzey⁵ believes that fibulae were used for the peplos and chiton. An ancient authority for the use of the fibula, Aelian,⁶ says that it was with the aid of fibulae that the Greek women of ancient times fixed the sleeves of their chitons around their arms. There is nothing in the context of Aelian's statement, however, to clarify the meaning of this ambiguous term. He may have been using it in the broadest sense to include all types of fastenings. It would seem, then, that archaeological evidence rather than literary must solve the problem.

Excavations in Greece have yielded numerous fibulae of the safety-pin type from Mycenaean times through the geometric and early archaic periods, but save for a very few scattered examples the fibula ceases to appear in the late sixth century. Of the fibulae found at Olympia⁷ by far the greater number are of the Mycenaean and geometric periods. The spiral and bow forms are all early, and several with large clasp-plates decorated with engraved designs⁸ are to be dated in the Dipylon period corresponding with similar examples from Dodona.⁹

Fibulae from the Argive Heraion¹⁰ are found in great numbers, both the stick-pin and safety-pin varieties. The sequence of style

¹ Daremberg et Saglio, *fibula*, p. 2001.

² *Catalogue of the Acropolis Museum*, I, pp. 42-49.

³ *Statues Archaïques de l'Acropole*, B.C.H., 1890, p. 308. Lechat, in his later works, *Le Sculpture Attique avant Phidias* and *Sculptures Grecques* published in 1925, while he does not repeat the statement of his earlier article implies it again and again in describing the costumes of statues. In his opinion the fastenings are always pins of some kind.

⁴ Daremberg and Saglio, *fibula*, p. 2003.

⁵ *Histoire du Costume antique*, see especially pp. 62 and 63.

⁶ *Var. Hist.*, I, 18? and Daremberg et Saglio, *fibula*, p. 2003.

⁷ Furtwängler, *Olympia*, IV, nos. 342-379.

⁸ Nos. 362, 362a, 365, 365a, 366a.

⁹ For another illustration of the Dipylon type see Daremberg et Saglio, *fibula*, p. 2005, fig. 2982.

¹⁰ Waldstein, *The Argive Heraeum*, I, p. 62 f., nos. 919-944.

may be traced through the early archaic period. The latest type found is the circle or ring fibula which de Cou places in the archaic period. The simplicity of these clasps and the meagre detail on the few which show decoration would seem to indicate that they belong early in the archaic period, possibly before 550 B.C. The decoration consists of engraved circles and a simple tongue pattern resembling a series of horseshoes, not unlike geometric designs. One fibula² is in the form of a recumbent lion with pin attachment. This is crudely modelled and most archaic in style. Here again evidence for the use



FIGURE 2

of fibulae is largely wanting after the early archaic period, though a few finds of later date do occur on the site.

There are a number of early fibulae from Dodona,² and in addition a lovely leaf-shaped fibula which is probably later than the sixth century.³ It is interesting to note that in the *Catalogue of Bronzes* in the British Museum no fibulae or brooches of Greek workmanship are listed later than the geometric period.

The last type of pin in common use is not the safety-pin fibula, but the stick-pin. This may be seen fastening garments over the right shoulder on the François vase.⁴ It appears similarly used on a

¹ No. 946.

² Carpanos, *Dodona*, pls. L and LI.

³ *Ibid.*, pl. L, 10. In the *Mon. d. Inst.*, II, p. XVI a fibula of this shape is represented on a red-figured vase of free style, where it is shown fastening the Doric chiton on the left shoulder.

⁴ Daremberg et Saglio, *peplos*, p. 383, fig. 5558.

bronze figurine in the Metropolitan Museum which Miss Richter dates in the late sixth century.¹ A third example of the stick-pin is on a red-figured vase from Vulci by Andokides dating about 525 B.C.² Occasionally the stick-pin appears after the sixth century. There is a krater from Falerii in the Villa Giulia Museum³ which shows such pins fastening the Doric chiton at the shoulders. Another interesting example is to be seen on a cup with white ground in Munich representing Europa on the Bull. Her peplos is fastened with four golden stick-pins, one on each shoulder and one half-way between the elbow and shoulder.⁴ It is an important fact that in no case is there an example where the stick-pin is used with the Ionic costume.

The rare appearance of the stick-pin after the sixth century is explained by Herodotos⁵ when he tells the story of the defeat and destruction of the Athenians—all save one man—at Aegina. This man upon his return to Athens was set upon and slain by the indignant wives of his unfortunate companions, who stabbed him to death with the pins (περόνησι) from their garments. Herodotos says that as a result a law was passed compelling them to change their dress for the Ionian that they might not use pins. Whether Herodotos is historically accurate, or is merely inventing a story to explain a change in fashion, at least he does make it clear that fibulae were no longer the rule. Certainly his story is plausible, for the stick-pin could have been a most deadly weapon when used as a stiletto. Such a pin must have been most inconvenient, and even dangerous for the wearer, since the sharp ends were entirely exposed, as may be seen on the vases mentioned above.

The event of which Herodotos writes, the defeat of the Athenians by the Aeginetans and Argives, took place shortly before 560, a date which accords well with the archaeological evidence for the discontinuance of the fibula. The few isolated survivals of the stick-pin in art after that date show, however, that the law was not strictly enforced, or else that Herodotos did not adhere strictly to the truth, but that he was merely attempting to give a logical explanation for the Ionic vogue of the time of Peisistratos.

The Ionic costume is generally worn by the archaic maidens of the Acropolis, and a careful study of these statues and vases of the sixth and following centuries shows that the Ionic costume was without

¹ Catalogue of Greek, Etruscan and Roman Bronzes in the Metropolitan Museum, figure on p. 40.

² Hoppin, *Red-Figured Vases*, I, pp. 40-41.

³ Furtwängler-Reichhold, *Griechische Vasenmalerei*, pl. 111.

⁴ *Ibid.*, pl. 114, 1 and Text, Series II, p. 284.

⁵ Herodotos V, 87 ff.

clasps, in spite of the opinion of Dickins, and of Reinach, who quotes the story, but disregards the evidence of Herodotos.¹ To be sure, Ionic chitons were sometimes sewn and hence free from dangerous pins, but this interpretation of Herodotos does not fit all cases.

The real explanation is to be found in the fact that the common method of fastening Ionic costumes was not by brooches, but by buttons,² and that a part of the statement of Herodotos is correct, namely, that the Ionic costume did not use pins.³ The buttons were



Denkmäler-Griechische und Römischer Sculptur, no. 295

FIGURE 3. DANCER FROM HERCULANEUM BUTTONING THE DORIC CHITON:
NAPLES MUSEUM

placed along one side of the sleeve at intervals. The number of buttons on a sleeve varied from two to eight (Fig. 1).⁴ The other

¹ Daremberg et Saglio, *fibula*, p. 2003. Reinach refers in n. 21 to black-figured vases which show the Ionic chiton fastened with what he considers pins.

² For buttons on Ionic chitons in the sixth century see a black-figured vase of Andokides, Pfuhl III, p. 69, and a black-figured vase of Pamphaios, Hoppin, *Black-Figured Vases*, p. 301.

³ Meyers, *Cesnola Collection of Antiquities from Cyprus*, p. 484, says that in Cyprus fibulae passed out of use about 700 B.C., earlier than in most parts of Greece and that they were superseded in part by buttons.

⁴ Figure 1a is from a crater from Bologna, *Mon. d. Inst.* X, pl. LIV.

Figure 1b = *Mon. d. Inst.* I, pl. XI and Furtwängler-Reichhold, pl. 137.

Figure 1c is from a Tyrrhenian Amphora, *Mon. d. Inst.* I, pl. LIV and Furtwängler-Reichhold, pl. 113.

side of the sleeve was furnished with loops, not buttonholes, since the two edges of the sleeve meet, but do not overlap. When one looks for sleeve-buttons one may find them again and again both in vase-painting and in sculpture, where they appear in relief, circular and slightly convex on top. These vary in diameter from .7 to about 1.3 cm.

Nor were buttons confined to the Ionian costume. The advantage of buttons over the old stick-pin was immediately apparent and the Doric dress was soon influenced by the Ionic to the extent of substituting buttons for the original fibulae. After the middle of the sixth century the Doric costume is generally represented with



FIGURE 4



FIGURE 5

large round buttons, one on each shoulder. These usually appear to be 2.5 cm. or more in diameter. They were attached to the fold of material in front of the shoulder and the back fold was fastened over the button as this layer of cloth appears overlapping the front and in some cases is visible beneath the button (Fig. 2).¹ In sculpture a clear example of the use of buttons on Doric chitons may be observed in the bronze dancers from Herculaneum in the Naples Museum. They all have buttons on the shoulders, but one (Fig. 3) is particularly significant since she is in the act of buttoning the chiton on the right shoulder. With the left hand she holds the button (not visible) while with the right hand she draws the fold of material over the shoulder from behind preparatory to fastening it over the button. A button of rosette form with a central knob is to be seen clearly on the left shoulder. That it is a button and not a pin is evident from the action of the hands as they fasten the garment. If she were about to use a pin the folds of the chiton from the front and the back would be seen overlapping and held in one hand while she prepared to insert the pin with the free hand.

The fastening was accomplished presumably by means of a button-

¹ Figure 2a is from a mirror from Praeneste. *Mon. d. Inst.* IX, pl. LVI, 2.

hole, though a loop or string tie would be possible, as a mirror from Praeneste in the Tyskiewicz collection shows (Fig. 2b).¹ Short strings without any buttons must have been used occasionally, at least for sleeves. Such fastenings are to be seen on two of Hieron's vases,² where the strings are not to be confused with the delicate lines which indicate the folds of material. A dancing Maenad on a vase by Nikosthenes shows groups of short strings at intervals along the sleeves.³ The strings are drawn more heavily than the other details and overlap the folds diagonally. On an Attic red-figured amphora representing Croesus on the funeral pyre,⁴ the sleeve of Croesus shows a combination of buttons and strings (Fig. 1c). In addition to the strings a small loop is visible beside the first button above the elbow.

Buttons were also used on armor in Greek and Roman times to fasten the shoulder straps to the cuirass. In many instances there were no buttonholes, but cords or thongs of leather were wrapped around the buttons and tied, as in Figure 4a.⁵ An example of the late sixth century occurs on a vase by Nikosthenes which has a warrior represented on one handle. The shoulder straps are fastened to a button.⁶ Another instance is on a vase of Brygos.⁷ The Etruscans also used this method of fastening armor, as may be seen in the two Etruscan bronze statuettes of Mars in Combat, which are in the Bibliothèque Nationale.⁸ Buttons with a central hole and string ties are clearly indicated.⁹

The cherished belief that the Greek costume consisted of a single folded piece of material is in no way impaired whether fibulae or buttons were the rule. The garment might still be quickly removed by unfastening the buttons on the shoulders or along the sleeves, and would at once be resolved into a single piece of cloth easy to fold and lay away in a chest. The advantage of this method of fastening is that after the costume had once been carefully draped, the buttons attached, and loops made at the proper places it would be a simple matter to don the garment again and to produce the same becoming effect with a minimum of effort. The permanent attachment of buttons to a garment does not mean that it must always be worn in

¹ Figure 2b = *Mon. d. Inst.* IX, pl. LVI, 3.

² Hoppin, *Red-Figured Vases*, II, p. 84 and p. 85.

³ Hoppin, *ibid.*, II, p. 226, left-hand figure at the top of the page.

⁴ Furtwängler-Reichhold, pl. 113.

⁵ From *Mon. d. Inst.*, X, pl. LIV.

⁶ Hoppin, *B.F.V.*, p. 287c.

⁷ Pfuhl III, p. 138.

⁸ Babelon et Blanchet, *Catalogue de Bronzes Antiques de la Bibliothèque Nationale*, figs. 184, 185.

⁹ For additional examples of buttons on armor see Furtwängler-Reichhold, IA, pl. 6, and pl. 15.

the same way. For instance, the himation thrown loosely around the body and over one arm might at another time be differently arranged and buttoned on the shoulders like the Doric chiton. An example of a garment used as an himation, but with the possibility of use as a chiton, seems to be represented on the vase from Caere showing the Ransom of Hector.¹ The attendant behind Priam wears the himation (Fig. 5), but near the upper edge of the material two button-like objects are attached about equidistant from the tassel ends of the garment, so that if the himation were rearranged and put on as a chiton the buttons would come on the shoulders.²

It is impossible to see the under side of these buttons which are drawn on vases or carved in relief on statues, and so the question may arise whether or not pins were attached to the back. The answer is that excavations do not yield such circular fibulae, whereas numerous buttons of glass, bone, and bronze have been found.

Glass buttons are by far the most common, though their purpose has not been generally recognized. An article by G. Eisen³ gives excellent colored plates of many beautiful glass buttons.⁴ These vary from .7 to 3 cm. in diameter. He does not believe that they are buttons, but calls them button beads, in spite of the fact that none is spherical. All are flat or slightly concave on the bottom and convex on the top. The design in the glass, often very colorful and intricate, appears only on the convex side—the side intended to be seen. Many of these buttons have a central perforation from front to back. A few oval ones have holes pierced lengthwise near the back, but the majority have no visible means of attachment. It is for this reason that Eisen rejects the possibility that they are buttons and suggests that they may have been strung as beads by placing two of equal circumference back to back and joining them with a section of cement through which a hole was made.⁵ The chief difficulty with this awkward arrangement is that such a necklace would be far from beautiful. The layers of cement would be very obvious and the tops of the "beads" bearing the color and design would be concealed by the adjoining "beads" on the string. But if they were used as buttons the decorative surfaces would be visible. The next point to consider is the method of attaching such buttons to the costumes.

¹ *Mon. d. Inst.*, VIII, pl. XXVII. Furtwängler-Reichhold, pl. 84.

² It is possible that the drawing of this vase is misleading and that the two button-like objects are in reality meant to indicate the border on the reverse side of the material. Even if this is the case, there seems to be no reason why certain costumes of the Greeks might not have done double duty in just this way.

³ *A.J.A.*, 1916, pp. 299-307, pls. IX and X.

⁴ Eisen dates some of these glass button beads as early as the fifth century B.C., and thinks that they come from Egypt, *ibid.*, p. 305.

⁵ *A.J.A.*, 1916, pl. X, figs. 27-28.

The buttons with a central hole¹ could be fastened to garments by means of a cord or thin leather thong, or possibly even a slender wire knotted at the top so that it would not slip through the button. This seems to be indicated in Figures 1c and 2a where the buttons are drawn with black centers. A Tanagra figurine in the Metropolitan Museum² has a button on the shoulder with a central hole clearly shown. The bronze statue from Herculaneum of a maiden fastening her chiton (Fig. 3) shows a button with a central knob which probably represents the knotted cord that served to hold the button in place. The buttons with a longitudinal hole³ near the back are not unlike buttons of glass today and would be attached in the same way. The difficulty comes in determining the method of fastening the buttons without perforations which are flat or slightly concave on the back side.⁴ Some of them have traces of a bronze attachment⁵ which Eisen explains as a bit of the rod with which the glass blower twirled the button in the process of decoration. Is it not more likely, however, that the glass blower would have employed a glass rod for this purpose? The traces of bronze mentioned are very likely a part of the loop for fastening the buttons to the cloth.

In the Metropolitan Museum are a number of glass buttons of Greek provenance dating from the fifth and fourth centuries. Among those of the fifth century seven are pierced with a central hole. These are convex with flat backs and the diameters of the openings vary from .1 cm. to .3 cm. There are others which have central depressions in the back where an attachment could easily have been inserted in cement or possibly resin.⁶ One button actually has the hole in back filled with cement,⁷ another⁸ has traces of something like glue (resin?) in the hollow. Evidently the depression, which is fairly well rounded and flattened inside, is due in part to the breaking off of the rod of the glass blower, but it looks as if in addition some smooth object of regular shape had been thrust in while the glass was still soft. In these depressed hollows attachments of metal or of bone may have been inserted which have disintegrated and disappeared. Some other examples in the fourth-century collection at the Metropolitan Museum have perfectly

¹ *Ibid.*, pl. IX, nos. 5, 11, 25.

² Acc. no. 13.227.12.

³ *Ibid.*, pl. X, no. 39.

⁴ *Ibid.*, pl. IX, nos. 6, 14, 24.

⁵ *Ibid.*, pl. IX, no. 3, and pl. X, no. 37; see also p. 303.

⁶ A good example of this type is acc. no. 17.194.826, having a diameter of 1.9 cm. The diameter of the depression is .5 cm. and its depth is about .4 cm.

⁷ Acc. no. 17.194.818.

⁸ Acc. no. 17.194.605.

smooth backs and are more difficult to explain, as they were not twisted on a rod, but were poured in a mould. If used as buttons they must have been held in a frame of some kind. Of course there is the possibility that they were covered with cloth, but it seems unlikely that the beauty of the glass would have been concealed. It does seem likely that buttons covered with cloth were used in ancient times, particularly by those in humble circumstances, but these doubtless had a wooden core and so have disappeared as completely as the garments.

Many bone objects which seem to me to be buttons are labelled "spindle-whorls" in the museums. The number of so-called spindle-whorls is enormous, for these have been found in abundance at Troy and in all later excavations in Greece and the islands. The tendency seems to be to call any object with a central perforation, not suitable for a necklace, a whorl. The whorl was attached to the lower part of the spindle to make it balance and to keep it twirling rapidly. For this purpose a rather heavy substance was necessary, such as terracotta or stone.¹ This explains the larger whorls with holes of considerable size which fitted over the spindle rod. The smaller ones may have been loom-weights rather than spindle-whorls. A spherical weight would have been appropriate for this purpose, and numerous examples of such weights made of terracotta are known. There are also many weights made for suspension with a perforation at the top. These are particularly suitable for loom-weights. One type of spindle made of bronze had the lower end of the rod inserted in thin, flat discs of bone. Examples are known from Italy.²

There seems no reason, however, for supposing that the ivory and glass buttons with convex obverse and flat reverse have anything to do with either the loom or the spindle. Moreover, this type is abundant and occurs frequently in graves. One whorl would presumably be enough for a spindle and one spindle would probably last a lifetime. We should, therefore, not expect to find whorls in great numbers. However, numerous buttons might be expected on the garments placed in the tombs. A great many buttons of colored glass and bone are listed from the tombs of Myrina.³

Seven of the so-called spindle-whorls of Hellenistic and Graeco-Roman date are in the Metropolitan Museum.⁴

They are all convex with flat backs and vary in diameter from 1.8 cm. to 4 cm. All have a central hole and are decorated with incised concentric circles, dots, and parallel crescents. The larger ones

¹ Daremberg et Saglio, *fusus*, p. 1425.

² Daremberg et Saglio, *fusus*, p. 1426, figs. 3384, 3385.

³ Pottier and Reinach, *Myrina*.

⁴ Acc. nos. c.s. 1669, c.s. 1588, c.s. 1665, c.s. 1667, c.s. 1659, c.s. 1662, c.s. 1592.

would be appropriate for the shoulder fastenings of the Doric chiton. Another type is larger ¹ still, having a diameter of 7.2 cm. It is flat and rather thin, decorated with an incised rosette and with concentric circles used for the border. If it is a button it could have been used only for the chlamys, owing to its great size. For a button of this type see Figure 6d which is from a bust of Hadrian.² A number of others in the Metropolitan Museum of similar appearance on the top have no central hole, and on the back are carved with a projection of .5 cm. and of slightly smaller diameter than the top. These are surely not buttons, but would make excellent stoppers for jars or bottles, since the projection could fit snugly inside a rim.



FIGURE 6. BUTTONS USED TO FASTEN THE CHLAMYS

From the Argive Heraion come a number of circular bone objects with small central hole.³ They are generally flat and have the surface decorated. Common designs are birds of somewhat archaic appearance on the obverse and rosettes on the reverse. No satisfactory explanation of their use has been offered. If strung in succession as beads the designs would be concealed and only the plain edges would be visible. They are well suited for use as buttons, with a knotted cord to hold them in place and in position to reveal the entire design of one side. Moreover, they might be reversed for variety. The size is suitable since they vary in diameter from 1.5 cm. to 2.5 cm. Bone buttons continued in use for some time after

¹ Acc. no. c.s. 1642.

² Hekler, *Greek and Roman Portraits*, p. 247, fig. b.

³ Waldstein, *Argive Heraeum*, pl. CXXXIX, nos. 9-20.

the Hellenistic and Graeco-Roman periods. The same convex type decorated with circles for the most part and having a central hole occurs in the Coptic period.¹

Buttons must also have been made of metal in Greek times, though these in the nature of the case have mostly disappeared. Two bronze buttons with convex tops having loop attachments on the back are in the Metropolitan Museum.² These are fairly large, having a diameter of 4.8 cm. and 5 cm. They are decorated with a central boss and a series of concentric raised bands, six in the first and five in the second example. In appearance they are like the buttons which fastened the chlamys in Greek and Roman times (Fig. 6, a, b, c).³ A button similar to the bronze ones in the Metropolitan with a raised boss, but with a stem and square guard on the back instead of a loop, was found in a tomb at Corneto (Fig. 4b).⁴ Such a button would not have been sewn on the garment, but would have been slipped through two small buttonholes in the manner of a cuff link. Another example of a double-headed button having the upper half in the form of a bull's head is in the Bibliothèque Nationale.⁵

Buttons of gold would have been too expensive for the majority, but might have been imitated in gilded glass or terracotta.⁶ A possible example is the lovely terracotta figurine of Nike from Myrina,⁷ with its well-preserved color. "One can distinguish the 'agrafe dorée' (περόνη) which fastens the two borders of the material in place on the left shoulder."⁸ The "agrafe dorée" is circular and of the proper shape and size for a button.

The fourth-century marble statue of a goddess from the Giustiniani Collection in the Metropolitan Museum has six holes about .3 cm. in diameter pierced at intervals along the sleeve for the insertion of buttons of some more decorative material, possibly of gilded bronze or of gold. In the case of some of the statutes of the Archaic

¹ Strzygowski, *Koptische Kunst*, pl. XIX, nos. 8905-8918. These are erroneously called spindle-whorls. In the British School of Archaeology Publication, *Heliopolis, Kafr Ammar and Shurafa*, pl. XLIX, 29, an ornamented button is published. The author (p. 43) calls it a whorl, but as he goes on to say that the type usually found was an unornamented disc of ivory with the remains of iron in the hole, it is quite certain that they were buttons, not whorls, as the whorl was slipped on the spindle rod without any need of a metal attachment.

² Acc. no. c.b. 424 and c.b. 419.

³ Figure 6c, with a boss and two concentric bands, is from a Roman relief. 6a and 6b are from figures of Hermes on Greek vases. In the original of 6a the thong from the hat of Hermes crosses the button. This I have omitted for the sake of clarity. Figure 6a = *Mon. d. Inst.* I, pl. XX; figure 6b = *Mon. d. Inst.* IV, pl. XXXIII; figure 6c = *Mon. d. Inst.* IV, pl. IV.

⁴ Figure 4b = *Mon. d. Inst.* X, pl. X^b, 17.

⁵ *Catalogues des Bronzes Antiques*, fig. 1937.

⁶ In Pottier and Reinach, *Myrina*, catal. no. 542, there is mention of two buttons of gilded terracotta.

⁷ *Ibid.*, pl. XXIII.

⁸ *Ibid.*, p. 363.

Maidens of the Acropolis, holes were made for the insertion of metal buttons.¹

It was customary to use only buttons of small size for the sleeves of the Ionic chiton and to reserve the larger buttons for the shoulders of the Doric chiton. This is evident in all periods. In the Metropolitan Museum the archaic statue from Paros of the sixth century wears an Ionic dress with buttons along the sleeves which are about 1.2 cm. in diameter. In the same museum a sixth-century statue from Sunium wearing the Ionic costume shows the edge of the sleeve caught together six times, but in this case no buttons are modelled. Apparently they were added in paint. Two examples of draped figures with painted buttons are described by Dickins.² In the first the "pins," or buttons—if the evidence set forth in this paper is correct—are painted green, and in the second the "pins" are picked out in red. Even where the buttons were modelled in relief paint was still applied. It was evidently customary to enhance the beauty of the Greek costume by means of colored buttons, and what more decorative or colorful than buttons of glass?

Examples of the use of buttons might be multiplied indefinitely were we to list the innumerable representations on vases, but it is hardly necessary for the sake of proving the point in question. The use of buttons was widespread for all types of Greek costumes, including armor. It is particularly difficult to understand why in contradiction of the evidence of Herodotos the belief has persisted so long that brooches were used on the sleeves of the Ionic chiton, since such tiny, circular fasteners, if furnished with a spring and clasp on the back, would not only be most difficult to fashion, but almost impossible for fingers to manipulate.

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¹ Holes for buttons remain in the following statues, *Cat. of the Acropolis Museum*, I, nos. 679, 669, and 694.

² *Cat. of the Acropolis Museum*, I, no. 670, p. 206, and no. 675, p. 215.

A REVISION OF *I.G.*, I², 302¹

FOR students of Athenian history and finance great interest attaches to a much mutilated and badly weathered inscription which contains records of payments made by the treasurers of Athena for public purposes during the years from 418-7 to 415-4 B.C. The five fragments of Pentelic marble which comprise this series of accounts were found at different times on the Acropolis. With the exception of one piece containing about half of the fourth year, which was carried to England by Lord Elgin and is now in the British Museum, the extant fragments are to be seen joined together as one stele in the Epigraphic Museum at Athens. Since the year 1842, when Rangabé first demonstrated that all five pieces belong to the same inscription,² various restorations have been suggested, many of them not based on a careful examination of the stone.

In this paper we intend to deal only with the payments made during the first two years, 418-7 and 417-6 B.C., recorded in the first thirty-four lines of the inscription.³ They are inscribed *στοιχηδόν*. The *Corpus* gives the number of letters in a line as eighty-six, but the editors have been forced by the difficulty of restoring lines of this length to assume in nine lines an uninscribed space at the end. Other inequalities in their restorations also tend to discredit their assumption of eighty-six letters in a line. Consequently, our first task is the determination of the exact number of letters.

This may be accomplished in two ways: first, by counting the number of letters in lines where the restoration is absolutely certain; and secondly, by fixing the relative positions of fragments *a* and *b*, as lettered in the first edition of the *Corpus*. Fragment *a* contains a few letters from lines 19-22 and the left-hand portion of the accounts for 417-6. Fragment *b* contains a part of the first line of the accounts of 417-6 and about sixteen letters from the centre of lines 10-20, with smaller portions of lines 6-9, 21, and 22. Measurements show that the spacing of the accounts for 418-7 and 417-6 is identical and that the same *στοιχηδόν* arrangement is maintained throughout both years. Therefore, since the first *iota* of *Κυδαρτίδαι* in line 20 is directly above the last *iota* of *Ἀθηναῖοι* in line 23, the *Corpus* must be right in restoring seven letters between the left edge of the stone and the *iota*. Again, since the *tau* of *ἄρχοντος* in

¹ *I.G.*, I, 180-183; Dittenberger, *Sylloge*³, 94; Hicks and Hill, *Greek Hist. Inscriptions*, 70; Michel, *Receuil*, 563.

² *Antiquités Helléniques*, 119-122.

³ The third year is discussed separately.

line 23 is directly below the *omicron* of *hoēθεν* in line 20, and since there can be no doubt whatever as to the correctness of the restoration of line 23, we know that the number of letters between the first *iota* of *Κυδαντίδαι* and the *omicron* of *hoēθεν* must be twenty-two, just as between the last *iota* of *ἈθENAῖοι* and the *tau* of *ἀρχοντος*. The restoration of the lacuna we shall discuss later.

It is a simple matter now to determine the number of letters missing to the left of fragment *b*. Since the *omicron* of *hoēθεν* is the thirty-first letter of the line, and since in fragment *b* there are twelve letters up to and including the *omicron* of *hoēθεν*, there must be nineteen letters to the left of the first *alpha* of line 20 in fragment *b*. In lines 18 and 19, we must likewise restore nineteen letters; in lines 14–17, 12, and 11, twenty letters; in lines 13, 10, and 8, twenty-one; in line 7, twenty-four, and in line 6, twenty-seven (before the *omicron*).

The width of the lacuna between fragments *b* and *c* can be determined exactly in lines 10 and 11, where the restorations are certain. There are, we see, twenty-seven letters missing in line 11, twenty-eight in line 10. The right edge of the stone has been preserved in fragment *c*, except that in lines 6–13 the surface has been broken off so that the last letters have disappeared. The position of the last letter, however, can of course be determined exactly by comparison with the lines immediately above and below. Now by a simple process of addition in line 10 we can ascertain the number of letters in a complete line—21 (the number of letters to the left of fragment *b*) + 13 (the number of letters in fragment *b*, line 10) + 28 (the number of letters between fragments *b* and *c*) + 23 (the number of letters in fragment *c*, line 10) = 85, the number of letters in a line.

We come to exactly the same conclusion if we restore line 1 in such a way as to leave blank for the name of the secretary seven letter spaces, the number which must be restored here to make it conform with *I.G.*, I², 370. The *Corpus*, since it uses a line of 86 letters, leaves a blank of eight letters for the secretary's name in line 1, although in the other set of accounts the name of the secretary for this year contained only seven. We may then consider it established that in the accounts for 418–7 the lines were 85 letters long, and since the accounts of 417–6 follow the same *στοιχηδόν* arrangement, they too contained 85 letters in a line.

The following changes in the *Corpus* transcript are now made necessary by this shortening of the lines.

In lines 1, 6, 7, 8, 10, 11, 13, 30, and 31 the letter *v*, which is used to indicate an uninscribed letter space, must be deleted, and in lines

28 and 29 the final *v* should likewise be removed. Line 28 is the only one where the stonecutter left an uninscribed letter space at the end of a line to avoid dividing a word. In line 1 where the *Corpus* prints *v*, the first stroke of H is visible upon the stone. Thus the *h* of *ἡερόν* must be shifted from the beginning of the second line to the end of the first. At the end of line 6 the initial *tau* of *τὸς* is clearly visible. This must be removed from the beginning of the seventh line. In line 7 we end the line with the *nu* of *παρὰδόναι*, taking it from the line below. At the end of lines 8 and 10 it is impossible to tell what letters should be supplied in place of the omitted *v*'s. At the end of line 11 there is room for two letters, where the *Corpus* prints one *v*, and here we restore the letters *-χο-* of *συνάρχουσι*. Line 13 ends with the last *epsilon* of *παρέδομεν*. In lines 30 and 31 omission of *v* is sufficient, for the final letters *lambda* and *kappa* are on the very edge of the stone below the final letters of lines 23-26, and there is no possibility of an extra letter beyond.

In line 3 the number of letters can be reduced from 86 to 85 by writing *συνάρχουσι* instead of *χσυνάρχουσι* on the analogy of line 11. In line 4 the *Corpus* has anticipated us in omitting the *chi* of this word, and in line 2 we suggest its omission for the sake of conformity. We can substitute for it the *h* of *hoῖς* which the *Corpus* omits. In the middle of line 7 the fact that there is room for only thirty-two letters in the lacuna between fragments *b* and *c* shows that here too the *chi* must be omitted.

The lacunae in lines 1, 4, 10, 11, 12, 13, 15, 16, 18, 23, 25, 26 should be shortened one letter. Thus the name of the secretary in the first line contains seven letters, as it should; for the name of the prytanizing tribes in lines 4 and 10 there are blanks of ten letters instead of eleven. Line 11 begins with a lacuna of seventeen, not eighteen letters, and in the following line there is a blank of nineteen letters for the date. Several restorations are possible here, ranging from the twenty-second to the thirty-sixth day of the prytany. Line 13 begins with a lacuna of twenty-one spaces. In line 15 between the *sigma* of *τῆς* and the *-ες*, the last syllable of the number of the prytany, there are fourteen spaces for the name of the tribe and the rest of the number. In line 16 a space of eighteen, not nineteen, letters is left unrestored, and the lacuna of line 18 numbers nineteen letters. The blank for the secretary of line 23 contains nine letters. In line 25 between the *nu* of *παρέδοσαν* and the *sigma* of *στρατεγῶι* there is room for twenty-nine letters, and in line 26 between the *sigma* of *τῆς* and the *pi* of *πρυτανειόσες* we leave place for seventeen letters.

In a number of places careful examination discloses letters, or the

traces of letters, which have not appeared in published transcripts heretofore. We have mentioned the H of line 1 and the *tau* of line 6. In line 17 the letters -τε- of -τες in fragment *b* are still visible, and in fragment *c* one need have no hesitation about printing the letters -ρυ- of *πρυτανείας* as legible. For the number of the prytany and the name of the tribe we have seventeen letter spaces. In line 23 the letters -χον- of *ἄρχοντος* are still visible. In line 22 the third and fourth numerals are partially preserved. Following □ we find a horizontal stroke which must be the cross bar of a *tau*, and in the next space the upper strokes of a *chi* are to be seen. Beneath the numerals XXXX at the end of line 12 careful study of the stone discloses four *sigmas*, indicating a payment of four thousand staters.

In line 20, the name of Nikias' colleague contains twelve letters, not eleven, as we have shown above. Furthermore, where the *Corpus* restores the *upsilon* of *Δ[υσιστρά]τοι*, one can clearly see the lower part of an *alpha* (or *gamma*), and where the *Corpus* reads *lambda*, the strokes of a *kappa* are distinguishable. The name is not Lysistratos, but Kallistratos, the son of Empedos. This name is well known as that of an Athenian hipparch who became famous for his heroic death in Sicily a few years later.¹ The name Lysistratos should be deleted from all lists of Athenian generals.

In line 14 the *Corpus* places after *ἄδειαν* a solitary *sigma* followed by sixteen dots to indicate that the line was originally inscribed. But examination shows that the last fifteen spaces were uninscribed. Consequently, a *sigma* standing alone would be meaningless. If anything was inscribed here, it must have been a figure indicating the sum paid. Since this was recorded in the line above, we must assume that the stone was uninscribed after *ἄδειαν*.

In line 19 the initial *sigma* of *στρατηγοῖς* appears on the stone as an *alpha*, obviously a stonecutter's error. In line 25 the name of the general on the stone is unmistakably *Κα[ι]ρίωνι*, ordinarily restored *[X]α[ι]ρί[ε]μωνι*. Are we to assume that the stonecutter made three errors in the spelling of one name, or shall we accept this as a peculiar name otherwise unknown to us?

Another name in this line should be changed, that of the *πατέδρος*. Since it now contains eleven letters, not twelve, the restoration *Χσ[ενο]κλείδει* is too long. As there are a number of possible restorations for this place, we suggest no substitute. After *Ἀθμονεῖ* we leave only five spaces unrestored, and we print the *h* of *hoῦτοι*, following the precedent set by the stonecutter (suggested in the *Addenda et Corrigenda*, I. G., I², p. 303).

At the extreme left in line 32 the tops of several letters are still

¹ Paus., VII, 16, 4; Plutarch, *De vit.* X. Or. 844 b; cf. *Prosop. Att.*, 8143.

preserved. Since the horizontal stroke of a *tau* appears in the fifth letter space instead of H, we restore the line thus: ἀτρε[ι] τ[ῆς πρυτανείας, φσεφισαμένο τῷ δέμῳ τὴν ἄδειαν — — —] *vacat*.

In line 21 the *Corpus* (Addenda et Corrigenda, p. 303) supplies the article τῷ after ἀναλόματος. In the following line there should be dots for eight numerals to correspond with the eight letters above.

It may be worth noting that Aiantis (line 28) held either the eighth or the ninth prytany, for the generals of the Melian expedition, to whom this payment was made, sailed in the summer of 416,¹ and only six letters are available for the number of the prytany, ὀγδόες or ἐνάτες. Then Antiochis held either the ninth or the tenth prytany, and the letters —άτες of the numeral are to be supplied. We have left for the name of the Hellenotamias nine or ten letters.

An interesting historical problem is connected with the restoration of lines 5 and 6. Where was Demosthenes stationed and what was the purpose of transferring to Euthydemus in Thrace money that had been assigned to him? The first payment has always presented a vexing problem. When we turn to Thucydides for enlightenment, we find Demosthenes during this year mentioned only in connection with the evacuation of Epidauros in the winter,² whereas the first payment was made during the first prytany, and the second payment, which was actually made to Demosthenes, was in the second prytany.

In line 14 the letters ΠΑΟΞ of Ἄργος make it certain that Demosthenes was in charge of troops at Argos at the time of the second payment, and it is natural to suppose that he was sent to take command of the troops who had taken part in the battle of Mantinea and who were left without leaders after the death of Laches and Nikostratos,³ or else that he was in charge of the Athenian reinforcements consisting of one thousand hoplites, who after the battle shared in the attack on Epidauros.⁴ The battle of Mantinea was fought not long before the Karneia which was celebrated in the month Karneios, corresponding with the second month of the Attic year. Thus a payment on the thirty-second day of the first prytany can scarcely be separated by more than a few days from the battle itself.⁵

By a coincidence, the letters ΟΞ appear on the stone in line 5 just before the words τοῖς μετὰ Δεμοσθένους, and the similarity between

¹ Thuc., V, 114.

² *Ibid.*, 80.

³ *Ibid.*, 74.

⁴ *Ibid.*, 75.

⁵ For Merritt's restoration of this line, see his *Athenian Calendar*, p. 117. The dates of the first two payments of this year deserve careful study, for they may possibly throw new light on the Athenian calendar.

lines 5 and 14 has tempted scholars to restore in this place also, ἐς Ἄργος. They assume that the expedition for which the first payment was intended was delayed for some unknown reason until the second prytany, and that meanwhile the funds which had been voted for it were diverted to the prosecution of the campaign in Thrace.

About the campaign Thraceward we have no further information. Müller-Strübing has suggested that Demosthenes was active in the north during this year,¹ and the possibility of restoring ἐπὶ Ἐϊόνος lends color to his view,² for Eion would naturally be the naval base of operations against Amphipolis. If Demosthenes was campaigning there, as is not unlikely, the money voted to him during the first prytany must have been intended for these operations. Is it too much to assume that he was recalled suddenly after the news of Mantinea to take the place of Laches and Nikostratos, who had been slain? A formal vote would then have been necessary before the money intended for the northern campaign could be given into the hands of the generals who succeeded Demosthenes, namely Euthydemos and his unknown colleague. If we suppose that the first payment was voted to Demosthenes while he was still ἐπὶ Θράκης, line 5 might be restored thus: [ἐραὶ καὶ τριακοστὴν τῆς πρυτανείας ὥστε δῶναι τριεράρχοις ἐπὶ Ἐϊόνος τοῖς μετὰ Δεμοσθένος. ζ—.

The *Corpus* restoration of line 6 is certainly wrong, for an *omicron* occupying the twenty-eighth letter space, preceded by a perpendicular stroke still visible (cf. *I.G.*, I¹, 180), makes the word δῶναι impossible. We suggest the following reading which will at the same time meet the physical requirements of the stone and harmonize with our restoration of line 5: [δοχσεν τεῖ βολεῖ καὶ τοῖ δέμοι ἀ]πο[καλέσαι μὲν τοῦτον, τὸ δὲ ἀργύριον παραδῶναι τοῖς ἑλληνοταμίαις καὶ τ—. Where the *Corpus* restores ἀποδῶναι, the word παραδῶναι seems to be required because of the phrase πάλιν παραδῶναι in the next line.

Any reading for these two very difficult lines must be at best conjectural, but we believe that our restoration is preferable to that given by the *Corpus*, since it does not assume that money voted for an Argive expedition was transferred to an expedition operating Thraceward. On the contrary, we hold that the sum of money in question was from the first intended for use Thraceward and that it was used as planned, although it passed through the hands of a different general. Nevertheless, the expression τοῖς μετὰ Δεμοσθένος, used twice in place of the regular phrase στρατηγῶι, presents difficulties of interpretation. It suggests that Demosthenes was not a

¹ *Rh. Mus.*, XXXIII, 78.

² *Ibid.*, 93; Boeckh, *Staatsh.*, II, 24.

regularly elected Athenian general, and that, as he was incompetent to receive state funds, the payments were made directly to officers of lower rank serving under his unofficial guidance. Yet the rôle which we, in common with other editors, have assigned him at Argos seems to be too important for any man not *στρατηγός*. Moreover, at the time when the payment of the second prytany was made, the only known operations in the Peloponnese were at Epidaurus. Consequently, it is surprising to find Demosthenes at Argos.

A further change in line 14 is made necessary by our removal of the second *epsilon* of *παρέδομεν* to the end of line 13. We suggest ἐπὶ "A]ργος, instead of ἐς "Aργος.

ALLEN B. WEST

BARBARA P. MCCARTHY

ATHENS

1 [Ἀθηναῖοι ἀνέλυσαν ἐπὶ Ἀντιφόντος ἄρχοντος καὶ ἐπὶ τῆς βολῆς ἡεῖ . . . ? . . . ἔγραμμάτενε· τ]α[μ]ίαι η-
2 [ιερόν χρεμάτων τῆς Ἀθηνάιας Πυθόδορος Ἀλαιεύς καὶ συνάρχοντες, τοῖς Φορμίον Ἀριστίνονος Κ]υδαθεναί-
3 [ως ἔγραμμάτενε, παρέδωκαν ἑλληνοταμίαις Ἐργοκλεῖ Ἀριστείδω Βεσαιεῖ καὶ συ]νάρχοσι καὶ παρέδροις η-
4 [ιεροκλεῖ Ἀρχεστράτῳ Ἀθμονεῖ καὶ συνάρχοσι, ἐπὶ τῆς . . . ⁶ . . . ἰδος πρότε πρυτανεύουσες καὶ ἡμέραι δευ-
5 [ἐραι καὶ τριακοστέϊ τῆς πρυτανείας . . . ⁶ . . . ὥστε δῶναι τριεράρχους ἐπὶ Ἑῖονος τοῖς μετὰ Δεμοσθένος. ἔ-
6 [δοχσεν τεῖ βολεῖ καὶ τοῖ δέμοι ἀ]ποκαλέσαι μὲν τοῦτον, τὸ δὲ ἀργύριον παραδόνα]ι τὸς ἑλληνοταμίαις καὶ τ-
7 [ὸς παρέδρος τοῖς ταμίαις τῆς] θεῷ Πυθ[οδόροι ἁλαiei καὶ συνάρχοσι καὶ τὸς τα]μίαις τῆς θεῷ πάλιν παραδ[ο]ν]-
8 [αι τοῖς ἑλληνοταμίαις κ]αὶ τοῖς παρέδ[ροις, τοῦτος δὲ δῶναι στρατηγοῖς ἐπὶ Θ]ράικες Εὐθυδέμοι Εὐδέμο[.]
9 [- - - - -] vacat vacat
10 [ἐπὶ τῆς . . . ⁶ . . . ἰδος πρυτα]νείας δευτέρας [πρυτανεύουσες ἑλληνοταμίαις Ἐρ]γοκλεῖ Ἀριστείδω Βεσαιεῖ[.]
11 [. ¹⁷ . . . Αἰχ]σονεῖ καὶ συνάρχο[σι καὶ παρέδροις ἱεροκλεῖ Ἀρχε]στράτῳ Ἀθμονεῖ: καὶ συν[ἀ]ρ[χο]-
12 [σι ¹⁸ . . .]ι τῆς πρυτανείας π[αρέδομεν ¹⁴ . . . χρυσί]ο Κυζικενὸ στατέρ[α]s XXXX ΣΣΣΣΣ [. . .]
13 [. ²¹] ἀργύριον τοῦτον [γίγνεται ¹⁹] | | τοῦτο τὸ χρυσίον παρέδομ[ε]-
14 [ν τοῖς τριεράρχοις ἐπὶ Ἀ]ργος τοῖς μετὰ Δεμ[οσθένος φσεφισαμένο τῷ δέμῳ τὴν] ἅδειαν vacat
15 [ἐπὶ τῆς -- ἰδος --]es πρυτανεύουσες ὀγδόει εἰκοστῇ ἡμέραι τῆς πρυτανείας στρατηγοῖς παρέδομ--
16 [εν ¹⁸]δε Αὐτοκλεῖ Ἀναφλ[υστίοι --] vacat
17 [ἐπὶ τῆς -- ἰδος --]tes πρυτανεύουσες τ[ρίτει καὶ δεκάτει ἡμέραι τῆς π]ρυτανείας παρέδομεν τὸ ἔχσ--
18 [. ¹⁹]πελοπόντος ἑλληνοστ[αμίαις Ἐργοκλεῖ Ἀριστείδω Βεσ]αιεῖ καὶ χυνάρχοσι καὶ παρ--
19 [έδροις . .]ενο[. ἱεροκλεῖ Ἀρχεστράτῳ Ἀθμονεῖ . . . ⁵ . . . οὗτοι δὲ ἔδωσαν στ]ρατηγοῖς Νικία[ι] Νικερát--
20 [ο Κυδαντ]ίδει Κ[αλλιστρ]άτοι Ἐ[μ]πέδο ἠοῖθεν | [- - - - -] vacat
21 [Κ ε ϕ á λ α ι υ ο ν á ν α λ ό μ α τ ο s τ ô] ἐ π ì τ ē s
22 [á ρ χ ē s ϩ ϫ Τ Χ ϩ Η Η Ι | | vacat
23 Ἀθηναῖοι ἀνέλυσαν ἐπ[ὶ Εὐφέμῳ ἄρ]χοντος καὶ [ἐπὶ τῆς βολῆς ἡεῖ ⁹ προ]τός ἔγραμμάτενε· τ[α]μίαις ἡε-
24 ρών χρεμάτων τῆς Ἀ[θηνάιας Ἀνασχικάτες Λαμπρεὺς καὶ χυνάρχοντες, τοῖς Εὐχσενος Εὐφάνος Προσπάλτ-
25 ιος ἔγραμμάτενε π[αρέδωκαν ²⁹ στρατεγοῖς ἐς] τὰ ἐπὶ Θράικες Κα[ι]ρίνονι X-
26 ακλέος Παϊανιεῖ ἐπὶ τῆς -- ἰδος -- s πρυτανεύουσες ἡμέραι δευτέ]ραι καὶ εἰκοστῇ τῆς πρυτα-
27 νείας φσεφισαμέν[ο τὸ δέμο τὴν ἅδειαν -- - - - -] vacat
28 ἐπὶ τῆς Αἰαντίδ[ος] es πρυτανεύουσες παρέδομεν στρατηγοῖς ἐς Μέλων Τεισ]ίαί Τεισιμάχο Κεφαλῆθεν,^p
29 Κλεομέδει Λυκομέδος Φλυεῖ ¹⁸ τῆς πρυτανείας φσεφισαμέν[ο τὸ δέμο τὴν ἅδειαν, Δ^{vvvv}
30 ἐπὶ τῆς Ἀντιοχ[ίδος] -άτες πρυτανεύουσες ἑλληνοταμίαις παρέδομεν -- - - - -]οι Α[ὐρ]ίδει, Τιμάρχου Παλ-
31 λεγεῖ καὶ στρα[τεγοῖς ἐς Μέλων Τεισίαί Τεισιμάχο Κεφαλῆθεν, Κλεομέδει Λυκομέδ]ος Φλυεῖ, τρίτει καὶ δεκ-
32 άτε[ι] τ[ῆς] πρυτανείας, φσεφισαμένο τὸ δέμο τὴν ἅδειαν -- - - - -] vacat
33 [Κ ε ϕ á λ α ι ο ν á ν α λ ό μ α τ ο s τ ô] ἐ π ì τ ē s
34 [á ρ χ ē s - - - - -] vacat

ARCHAEOLOGICAL NEWS¹

NOTES ON RECENT ARCHAEOLOGICAL EXCAVATIONS AND DISCOVERIES; OTHER NEWS

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NECROLOGY

Alexis Bobrinsky.—One of the most distinguished amateur archaeologists of prerevolutionary Russia, Count Alexis Bobrinsky, died at Grasse, September 2, 1927, at the age of seventy-five years. A great landed proprietor in the Ukraine, he excavated numerous tumuli at Smiela, near Kiev, and published the results with admirable illustrations (1887-1901). He also wrote on the Tauric Chersonnese and was for a long time president of the Imperial Archaeological Commission. He often took part in archaeological congresses outside of Russia and received many honors in his own country. (S. R., *R. Arch.* xxvi, 1927, p. 281)

Rudolph Ehwald.—The librarian, Dr. Rudolph Ehwald, died at Gotha in 1927 in his eightieth year. He published the works of the Anglo-Saxon Aldhelm in the *Monumenta Germaniae*, a facsimile of the *Biblia Pauperum* of Gotha, etc., but was best known as the foremost Ovidian scholar of Germany, especially through his "Jahresberichte" on Ovid. (S. R., *R. Arch.* xxvi, 1927, p. 282)

Paul Foucart.—In *B.C.H.* 1, 1926, pp. 261-262, there appears an anonymous tribute to Paul Foucart, who died in 1926 in his ninetieth year. His connection with the French School at Athens began in 1859, when he became a member, remaining till 1861, during which time he made some trial excavations at Delphi. He revisited Greece in 1868, and in 1878 was appointed Director of the French School, holding this post until 1890. He was primarily an epigraphist, and his term as Director is known in the history of the School as "la renaissance epigraphique."

Gustave Fougères.—Archaeology suffered a great loss by the death, December 6, 1927, of Gustave Fougères. He was born in 1863, became a member (1885) and director (1912-1918) of the French School at Athens, Professor of Archaeology (1918) at the Sorbonne, and (1922) member of the Académie des Inscriptions. He conducted excavations at Mantinea, where he discovered the Praxitelian reliefs of Apollo and Marsyas, and other excavations in Arcadia. The results were published in a monograph in 1898. He also conducted excavations in Thessaly and Asia Minor and at Delos. Under his directorship the French School returned to the scenes of earlier work in Thasos and Asia Minor. Among his works are a

¹ The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor HEFFNER, Editor-in-charge, assisted by Professor SAMUEL E. BASSETT, Professor C. N. BROWN, Miss MARY BUCKINGHAM, Professor SIDNEY N. DEANE, Professor ROBERT E. DENGLE, Mrs. EDITH HALL DOHAN, Professor HAROLD N. FOWLER, Dr. STEPHEN B. LUCE, Professor RALPH VAN DEMAN MAGOFFIN, Professor CLARENCE MANNING, Professor ELMER T. MERRILL, Professor LEWIS B. PATON, Professor HOMER F. REBERT, Professor JOHN C. ROLFE, Professor JOHN SHAPLEY, Professor FRANK G. SPECK, Professor AXEL J. UPFVALL, Professor SHIRLEY WEBER, and the Editors.

No attempt is made to include in this number of the JOURNAL material published after June 30, 1928.

For an explanation of the abbreviations, see Vol. xxx, 1, p. 124.

monograph (with Hulot) on Selinus, a revision of the *Guide en Grèce*, a book on Athens, and a considerable part of Vol. I of the *Histoire des civilisations et des peuples*. He was an admirable scholar and a man of noble character. (S. R., *R. Arch.* xxvii, 1928, p. 200)

Georges Lafaye.—Born in 1854, Georges Lafaye died September 29, 1927. He was educated at the École Normale and the École de Rome (1878), before teaching at Aix, Lyons, and (1893) the Sorbonne. His published work is chiefly concerned with Latin literature and Roman antiquities. He was an important collaborator in the *Dictionnaire des Antiquités* and in the collections, directed by Cagnat, of the Greek inscriptions *ad res Romanas pertinentes* and of mosaics (1909). (S. R., *R. Arch.* xxvii, 1928, p. 201)

Basil Parvan.—Eastern Europe lost one of its foremost scholars by the death at Bucharest, in June, 1927, of Basil Parvan. Born in 1882, he studied at Bucharest, Jena, Berlin, and Breslau. In 1909, after obtaining his doctor's degree at Breslau, he was made Professor of Ancient History and Epigraphy at the University of Bucharest, then director of the Museum of Antiquities, and, in 1913, member of the Academy, of which he was secretary at the time of his death. He was also director of the Roumanian School at Rome, the rapid progress of which was in great measure due to him. (S. R., *R. Arch.* xxvi, 1927, p. 280, with partial bibliography. See also Andriescu, *Rev. Hist. du S. E. Européen*, 1927, pp. 230–241.)

B. Lewis Rice.—The director of the archaeological department of the state of Mysore, the eminent Indianist B. Lewis Rice, died in July, 1927, at the age of ninety years. He had published more than nine thousand inscriptions (*Epigraphia Carnatica*) and, in *Bibliotheca Carnatica*, a great number of works, some of which go back to the ninth century. In the *Imperial Gazetteer of India* the articles "Mysore" and "Coog" are by him. He was one of the chief contributors to the *Indian Antiquary* and the *Journal of the Asiatic Society*. (X., *R. Arch.* xxvi, 1927, p. 282; *London Times*, July 12, 1927)

ORIENTAL AND CLASSICAL

EGYPT

SAKKARA.—In *The Illustrated London News*, January 7, 1928, pp. 8–9 (6 figs., one in colors) are shown reconstruction drawings of the very unusual buildings recently excavated by Mr. CECIL M. FIRTH at the Step Pyramid, Sakkara, and belonging to the Third Dynasty. The architecture of these structures is characterized by an appearance of striking modernity, though the buildings are perhaps the oldest stone structures in Egypt. One of the tiled chambers in the tomb is shown with its actual colors, work that belongs in the period around 3000 B.C.

Excavations at Thebes.—In *B. Metr. Mus.*, Section ii, February, 1928, pp. 1–58 (55 pls.), H. E. WINLOCK reports on the Museum's Egyptian excavations at Thebes from 1925 to 1927. Work on the sandstone burial crypt in the tomb of Queen Neferu, the best burial crypt of the Eleventh Dynasty (about 2000 B.C.), was completed.

As a result of finds in the Theban necropolis, the guess is hazarded that the terracotta cones found in many places in this area, and formerly thought to be representations of loaves of bread, are really the ends of the poles or logs of an ancient Egyptian house.

Most interesting for shedding light on Egyptian history and warfare of the Eleventh Dynasty are the cheaply buried corpses of sixty soldiers in whose bodies were found the arrow heads and shafts with which they were wounded and evi-

dences of the death blows dealt by the victors. This evidence substantiates the battle pictures and monuments to Egyptian victories.

The names and titles of Mentuhotep and his courtiers were found cut in the rocks by a professional sculptor near Silsileh on the bank of the Nile, probably a memorial of the King's presence at that spot during the return of an expedition to the Sudan.

A complete statue of Mentuhotep III was found in the avenue leading up to his temple.

There were found two hundred and ninety-nine scarabs, the most beautiful specimens of lapidary work of the Eighteenth Dynasty (about 1500 B.C.), deposited on the day of the founding of the temple of Queen Hatshepsut at Deir el Bahri. Of these two hundred and ninety-nine scarabs, one hundred and fifty-three give the names and titles of the Queen, a fact which may help to clear up any doubt that she was the founder of the temple. The founding of the temple can be dated early in the reign of Thutmose III, as is indicated by the spelling of his praenomen "Menkheper-*en-re*," in the fashion current only during his first years on the throne. Further evidence on the dating of the temple is given by a jar of food labeled "Year 7, Third Month of Winter, 15th Day," found buried under the embankment along the temple avenue. Since the road to the temple site was probably the first thing constructed, the foundations of the temple could not have been laid before that date. On the other hand, as food was probably not stored in such a way for any length of time, it is probable that the jar was thrown away and buried under the embankment soon after the seventh year.

The unfinished tomb of Senmut, architect of the temple of Queen Hatshepsut, showed one decorated room of unusual beauty with one of the earliest and best astronomical charts ever found, and two unfinished chambers. This tomb is suggestively like the Queen's own.

Many fragments of statues were found from Queen Hatshepsut's temple, but because of their sadly mutilated condition much time will be required in studying and assembling their parts.

Pp. 59-72 (15 figs.), N. DE GARIS DAVIES makes a report on the graphic work of the Egyptian Expedition. The Museum has obtained from the Egyptian Exploration Society at El Amarna a copy in color of the remains of a fine painting of geese, nearly life-size and in the peculiar style of the Northern Palace.

C. K. Wilkinson, working at Thebes, has completed his great copy of the Nubian tribute in the tomb of Huy and the enterprise undertaken by Mr. and Mrs. N. de Garis Davies on the tomb of Rakhmire is nearing completion.

The author publishes some interesting graphic pictures made from the temples at Thebes which indicate the wide range of moods and movements represented in the Egyptian dance.

Pp. 73-75, A. M. LYTHGOE publishes a list of private Tombs at Thebes recorded by the Egyptian Expedition of the Museum during the years 1907-1927.

ASSYRIA AND BABYLONIA

The Amorites.—In *R. Bibl.* xxxvii, 1928, pp. 63-79, P. DHORME begins an elaborate study of the origin of the Amorites, their presence in Babylonia, and the alleged early Amorite Empire in northern Mesopotamia. The discussion is called forth by the recent claim of T. Bauer, approved by Landsberger, in opposition to A. T. Clay, E. Meyer, and others, that there never was an Amorite empire west of Babylonia in the third millennium B.C., and that the region called (*KUR*) *MAR-TU* (*KI*) in inscription of the period of the first dynasty of Babylon was a mountainous

region situated to the Northeast of Babylonia. The *MAR-TU* = *Amurri* people came originally from this country, but the name soon became a professional one applied to other Akkadians. The East Canaanite (West Semitic) names in the period of the first dynasty of Babylon belong to a new race that began to enter Babylonia in this period, and they have nothing to do with the *Amurri*. The much later (*mat*) *Amurri* in the Lebanon has nothing to do with the ancient *Amurri*. This position Dhorme regards as untenable, and begins his attack upon it by a thorough examination of the West Semitic personal names in tablets of the First Dynasty.

SYRIA AND PALESTINE

The Inscribed Jar-Handles from Jerusalem.—The recent excavations on the temple-hill in Jerusalem have revealed numerous jar-handles with brief alphabetic inscriptions. Attempts to read these have failed because the sign ☉ at the beginning of most of them has been treated as a letter of the alphabet. In *Pal. Ex. Fund.*, lix, 1927, pp. 216–217, A. H. SAYCE suggests that the first sign is not a letter, but is the well-known ideograph for the Sun-god in Egyptian and Hittite. In most of the inscriptions this sign is followed by the letters *h r y*, that is, “of the mountain.” In one inscription the alphabetic letters are replaced by the Hittite hieroglyphs ☉ △ ΔΔΔ which have the meaning, “The Sun-god, king of the mountain-land.” The letters of these inscriptions vary little from those of the Phoenician inscription from Gebal of the thirteenth century B.C. And they raise the question whether these jar-handle inscriptions are not much older than the sixth century, to which they are commonly assigned.

UR.—In *Ant. J.* viii, 4 (Oct. 1927), pp. 385–404 (8 pls.), C. LEONARD WOOLLEY reports on the work carried on at Ur by the Joint Expedition of the British Museum and the Museum of the University of Pennsylvania, from October, 1926 to February, 1927. The report deals with the excavation of building sites (E M) under a mound lying against the southwest wall of the temenos, where there were found ruins from the time of Abraham. A large building of the Larsa period also was uncovered. The north corner of the temenos was dug out revealing a new gateway in the wall. Further excavations were made on the temple of E-Nun-Mah and an important royal building to the northeast of the temenos was cleared. Valuable information on the history and character of the enciente wall of the Ziggurat terrace was discovered through work done on the southeast and southwest faces of the Ziggurat. The site close to the southwest wall of the Nebuchadnezzar temenos revealed a well preserved quarter of a town, dating between 2100 and 1900 B.C. The streets were narrow and paved with mud, running roughly at right angles. The house doors opened directly on the streets. The houses were often of two stories with walls of brick, burnt below and mud above. The essential feature of the ground plan of these houses was an open court, paved with burnt brick, which supplied air and light to the surrounding rooms. On the ground floor might be found a reception room, kitchen, lavatory, sometimes a private chapel, and a lobby. Under the chapel floor usually there was a burial vault, but human remains might also be buried under the floor of any room. The discovery of a standing arch in one of the houses is an important fact in Sumerian architecture. A staircase led to the second floor, the rooms of which were almost identical in plan with those below. A wooden balcony, over which the roof extended, afforded means of passage from one room to another. Repairs and rebuildings of these houses were effected frequently and there were some deviations from this type.

Pp. 404–406 (1 pl.), E. BURROWS writes about the inscriptions discovered: a set of ten tablets containing inscriptions of kings of Akkad, Ur, Isin, and Larsa; date

lists; land-plans; business documents; school exercises; texts; a score of important archaic tablets with several apparently new signs; a clay cylinder seal; a duck-weight (5 mna) with inscription; an ivory box-lid with a Phoenician dedication to Astarte; clay cones, and brick inscriptions.

After a discussion of certain reconstructions of ruins previously excavated (pp. 407-410), there follows a report (pp. 411-413) of the work done on site S M (the area bounded by the Temenos Wall, E-Nun-Mah, the Nin-Gal temple called Gig-Par-Ku, dwelling houses attached to the temple and by Dungi's palace of E-Harsag. A Larsa reconstruction of a Third Dynasty building and remains of other buildings, which proved of little interest, were uncovered.

Pp. 413-415 contain the report of the discovery of the largest of all the Temenos gates—the gateway leading to the great neo-Babylonian temple of Nannar, the principal shrine of the Sacred Area. This completes the plan of the Temenos Wall.

Pp. 416-423 (1 fig.), M. E. L. MALLOWAN reports on the discoveries made on the mound lying one mile to the northeast of the Temenos Wall. There was unearthed one end of a heavily buttressed building of burnt brick, whose corners were orientated to the cardinal points of the compass. By means of the stamps on the bricks the building can be dated 201 B.C. The groundplan of the building shows a long, narrow hall with two flanking rooms at either end. It is supposed, judging from the thickness of the walls and the solidity of the buttresses, that the building had a three-arched vaulted ceiling. Decorated bricks found in several places can be attributed to Sin-idinnam. Two of these bricks had an eighteen-column inscription. The inscriptions, certain objects found, the vaulted ceiling, and the fact that the building adjoins the Third Dynasty cemetery of Ur, lead to the suggestion that the building was a mortuary chapel erected in honor of Nur-Adad, the father of Sin-idinnam.

In *ibid.* viii, 1 (Jan. 1928), pp. 1-29 (9 pls.), C. LEONARD WOOLLEY continues his report. Three superimposed cemeteries, lying at the southeast end of the temenos enclosure, were dug, and were provisionally dated 2700-2500 B.C., 3200-3100 B.C., and 3500 B.C. In these cemeteries two types of burial existed contemporaneously, with certain modifications: larnax burials, in which a clay coffin was used; and inhumation, in which the body was wrapped in matting and placed in the matting-lined grave-shaft. Graves of the earliest period contained clay vessels for food and drink, offering-tables, stone vases, instruments of stone, copper, gold, or silver, such as axes, spears, arrows, chisels, bows, drills, etc. Beads and toilet articles were also found. Clay boats used for religious purposes and laden with offerings were commonly found. The graves of the second period are smaller and neater and are distinguished by their pottery. The third period is also distinguished by its pottery and by its cylinder seals. The author next gives a brief description of some of the individual objects found. The results of the year's work at Ur confirm the facts that the Sumerian civilization was a prosperous one, already far advanced, and that it doubtless influenced Egyptian civilization considerably.

In *The Illustrated London News*, March 3, 1928, p. 337 (7 figs.), additional recent discoveries at Ur are described. A large pit was excavated on the slope of which lay the bodies of six soldiers sacrificed as guards of the tomb. Two four-wheeled wagons were also found together with the remains of the oxen and the grooms. Fifty bodies of persons had been thrown into the pit, a sacrifice to their master. The discovery of a true arch of baked brick is important for the history of architecture; the true arch as well as corbel vaulting and the dome were all employed at Sumer. The tomb of Queen Shub-ad produced about 150 objects

consisting of jewelry and personal ornaments as well as bowls, tumblers, drinking-tubes, lamps, brazier of gold, silver, copper, and lapis lazuli.

In *ibid.* June 23, 1928, pp. 1171-1176 and 1200 (9 figs.), C. LEONARD WOOLLEY writes about human sacrifice as evidenced by the discoveries in the royal graves at Ur. The article is illustrated by means of reconstruction drawings setting forth the scene in the grave shaft immediately before the sacrifice, when the king's attendants, the oxen that drew the wagons, the food and drink, and everything else that he was supposed to enjoy after his death, were drawn up. Perhaps all the persons and animals were struck down in death just as they here stood. A bull's head of gold with beard and hair of lapis lazuli illustrates one type of remains found. Mosaic inlay work constructed out of shell, pink limestone, and lapis lazuli gives a remarkably vivid picture of Sumerian life. "As a work of art it is unparalleled; as a historic document, invaluable."

Gold-Work.—In *The Illustrated London News*, January 21, 1928, p. 91 (9 figs.) is a brief report of the discovery at Ur of four gold vessels which are reported to be the "finest examples of gold-work ever yet unearthed in Mesopotamia." Near the place where these vessels lay were found a saw and chisels also in gold and presumably intended for ceremonial purposes. A twelve-stringed harp and chariot were also found. The harp is richly ornamented with gold and its keys are of copper. The elegantly decorated chariot shows gold lions' heads and a very realistic figure of a donkey. The grave from which these remains were taken is dated around 3500 B.C.

Royal Tombs.—In *Mus. Journ.* (Univ. of Penna.) xix, 1 (March, 1928), pp. 4-34 (11 full-page plates, 15 plates in text), C. LEONARD WOOLLEY notes the Royal Tombs of Ur of the Chaldees, with an introductory page by L. L. (Leon Legrain).

The discovery of these royal tombs is the outstanding feature of the sixth campaign of the Joint Expedition of the British and University of Pennsylvania Museums.

The first finds—splendid gold jewelry, beads, pendants, fine cylinder seals, etc., were in the grave in which the gold dagger was found last year. The next discovery was the grave of Mes-Kalam-Dug, rich in vessels of stone, clay, copper, and silver, and one magnificent fluted bowl of yellow gold. Weapons and tools were also found in this grave, as well as jewelry of exquisite workmanship. Most remarkable was a life-size solid gold peruke, "the finest discovery yet made in Mesopotamian archaeology."

At more than six metres below the surface was found a two-chambered, corbel-vaulted tomb that was undoubtedly royal, but it had been plundered. The inner room still yielded some gold and silver ornaments of the better class. This tomb and other discoveries of this dig go to show that in the very early period a certain number of retainers and slaves were slaughtered and buried with the king at his funeral.

A unique shaft grave was next revealed, a large trench forty by seventeen feet in extent. In it was found an elaborately inlaid harp, with sounding box, keys, etc. Buried in the shaft were several persons without funerary furniture, a chariot of inlaid wood with magnificent realistic gold decorations, and the asses and grooms were lying beside it. Many precious small objects were also dug up. In all this large area, however, the tomb and body of the principal person had so far failed to appear. Upon removing a box, which presumably had contained clothing, a hole was found, revealing bricks of the under structure. This was a tomb of vaulted stone and brick which had been plundered from above. A few small objects in gold and a remarkable silver model, 60 cm. long, of a boat com-

plete with oars, etc., were with the more normal finds the interesting things there.

Behind this, and abutting on it, was a stone-walled, brick-roofed tomb. In its large shaft area were buried fifty-eight persons sacrificed to the man in the tomb proper. Much gear and decorative jewelry accompany these bodies; two ox carts, with one ox completely preserved are there also. The chamber is that of a queen, Shub-Ad, and in it were many gold objects—vessels, toilet utensils, ornaments, and work in other costly materials. The queen's body was literally covered with jewelry (which is listed in the article), and her enormous and elaborate headdress makes it appear that here again, surely, "uneasy rests the head. . . !"

Below the tomb of Mes-Lalam-Dug was found another with the ramp entrance, slain soldiers, etc., and, although it lay forty feet beneath the modern level and immediately under the spoil heap of last season, the force was put to work and the whole cleared in one week! Three apsidal corbelled vaults occupy the whole shaft (twelve by eight metres). This stone building is one of the earliest yet found by the Joint Expedition, and the stone must have been brought at least 110 miles. Unfortunately the tomb had been plundered, but some valuable work was left. An important find was a mosaic stela, which can easily be restored, showing scenes of Sumerian life. This may well turn out in interest ranking above any other Sumerian antiquity known.

ASIA MINOR

EPHESUS—Excavations in 1926.—In *Jh. Oest. Arch. I.* xxiii, 2 (1926), Beibl., col. 247–300, J. KEIL gives a preliminary survey of the work of the Austrian Archaeological Institute during the autumn of 1926. He gives a plan of the neighborhood of the Stadium, a plan of the Nymphaeum, three inscribed Mother-reliefs, photographs and a drawing of the cemetery near the grotto of the Seven Sleepers.

GREECE

Archaeology in 1926.—In *B.C.H.* l. 1926, 536–581 (15 figs.), there is the usual summary of the work done in Greek lands during the year. Especial attention is paid in Attica to the restoration of the north colonnade of the Parthenon; in the Peloponnese, to the American excavations at Corinth and Nemea, to the extraordinarily fruitful campaign of the Swedish expedition at Asine and Dendra, many of these finds being illustrated, to the work of the British School at Sparta, and to short campaigns by members of the French School in various places. It is of interest to record that one of its members is engaged in making plans and drawings of many of the Frankish castles in the Morea and elsewhere in the Greek peninsula. In Northern Greece should be particularly noted the exploration of Haliartus by the British, the campaign of Frederik Poulsen at Kalydon, and the excavations conducted by the Greeks in Epirus, Thessaly, and Macedonia, in which latter region the British School also worked. In the islands, the French have done some work at Thasos and Samothrake, but their principal efforts during the year were at Delos, where the sanctuary of Asklepios was uncovered. In Crete, especial attention is paid to the continuation of the investigations of the French at Mallia, a plan of the palace being given. In Asia Minor the Germans worked at Samos and Ephesus, the latter excavation being in conjunction with the Turkish authorities at Smyrna. A short note on the finds of the Italians in the Cyrenaica concludes the summary.

Archaeology in Greece, 1926–1927.—A. M. WOODWARD's annual summary of recent archaeological work in Greece and once-Greek lands, based largely on re-

ports received from the excavators, appeared in *J.H.S.* xlvii, 1927, pt. ii (pp. 234-263; 7 figs.). It follows the work of the various schools in Athens and includes that of some privately supported enterprises. Most of the ground has been covered in recent "News Items from Athens" in this JOURNAL.

ATHENS.—The Sanctuary of Artemis Kalliste.—Remains accidentally discovered in 1922 in digging for the foundations of a building to be erected on Ceramiscus Street, Athens, proved to be a series of three tombs. This site thus aroused the interest of the government, and further excavations were conducted, revealing the presence of a sanctuary not far off, and adjoining the cemetery, of which the three tombs were a part. These excavations were in charge of A. PHILADELPHUS, Ephor of Antiquities in Attica, who reports the results and gives an inventory of the finds in *B.C.H.* li, 1927, pp. 155-163 (pl. VIII; 4 figs.). Most interesting is a relief, dating apparently in the third century B.C., showing a man and his wife invoking a goddess, who stands behind her altar, carrying a torch, and in front of two large pithoi. This goddess appears to be identified by a dedicatory inscription on another stone as Kalliste. Most of the other objects are ex-votos, for the most part offered by or for women, as they represent parts of the female body, and two of which bear the name of the same goddess. Pausanias (I, 29, 2) records a sanctuary of Artemis Kalliste in this neighborhood, which is near the ancient Street of the Academy, and this is undoubtedly what has been discovered here. The function of the goddess appears to have been as a protector of the virginity of maidens, a goddess to whom women desiring to become mothers prayed for help, and an attendant in the actual period of childbirth. As a result, she shares the rôle of Eileithyia, with whom she is often confused.

The Relief of Kalliste.—In *B.C.H.* li, 1927, pp. 164-169, P. ROUSSEL comments on the relief of Kalliste published by Philadelphus in the article immediately preceding. His interest is in determining the significance of the two pithoi behind the goddess. It is first suggested that, as Kalliste was the patron divinity of women desiring children, she assumed also a function of presiding over the fertility of the soil, and the pithoi might therefore symbolize rich and fruitful crops. But there may be a deeper significance; for it is also pointed out that, according to the ancient texts, Pandora's box was in reality a pithos. The original Pandora is not the creature described by Hesiod; she is the personification of the Earth herself, and her "box" gives to mortals their prosperity or adversity. But the pithos has also a funerary character, as a burial jar. In view of these things, the suggestions are made, first, that the two pithoi in the relief might be those, that, according to Homer, held, the one, the good fortune, the other the ill, of mankind; and second, that it may have something to do with the doctrine of *palingenesis*, or the reincarnation of the soul in a different body. The goddess may well have been worshipped in this connection, especially in view of the fact that her sanctuary was adjoining a cemetery.

Note-books of Sir William Gell.—In *B.S.A.* xxvii, Session 1925-1926, pp. 67-69, A. M. WOODWARD briefly describes six note-books of Sir William Gell recently acquired by the British School at Athens. Pp. 69-78, R. P. AUSTIN publishes or discusses thirty-one inscriptions from Notebook 1 and gives references, with brief notes, for other inscriptions which have been satisfactorily published elsewhere. Twelve inscriptions are here published for the first time, but none is of great importance. Pp. 79-80, A. M. WOODWARD gives references for fifteen Attic inscriptions which have been published elsewhere and publishes three inscriptions from Eleusis, two of which are epitaphs, the third a dedication in honor of a hieromantis. These eighteen inscriptions are from Note-book 2.

A Corinthian Krater.—The Metropolitan Museum has recently acquired a

black-figured Corinthian krater, produced near the beginning of the sixth century B.C. In the principal scene of the vase the *dramatis personae* stand in a frieze, confronting each other in heraldic fashion. The scene seems to represent the return of Alexandros to Troy, bringing Helen with him. (CHRISTINE ALEXANDER, *B. Metr. Mus.* xxiii, 2 (Feb. 1928), pp. 48-49 (2 figs.))

CYPRUS.—In *The Illustrated London News*, April 7, 1928, pp. 576-577 (14 figs.), EINAR GJERSTAD reports on the results achieved by a Swedish Archaeological Expedition in Cyprus, whose objective was to ascertain the rôle played by Cyprus as the link between Eastern and Western civilization. Lapithos, on the northern coast, and Karavostassi, ancient Soli, on the west coast, were chosen for special investigation. Twenty-three tombs of the Early and Middle Copper Age, c. 3000-1600 B.C. were opened. Two of these tombs are especially significant. In one of them were the bodies of the aristocratic warriors, and the other has been regarded as a royal tomb. A collection of 133 copper weapons was found in the warriors' tomb. These discoveries tend to confirm the belief that colonists from Asia Minor came into Cyprus in the Early Copper Age. The examination of Early Iron Age tombs reveals many Mycenaean features, and the conclusion is reached that the Greeks colonized this island before the close of the Mycenaean Age and continued the burial practices of that age in Cyprus after a change had taken place in Greece at about 1100 B.C.

Clay Lantern from Cyprus.—In the *Bull. Roy. Ont. Mus.*, No. 7 (March, 1928), pp. 2-3 (1 fig.), J. H. LILFE announces that that Museum has recently acquired a clay lantern from Cyprus of the type used by the poorer classes who could not afford decorated bronze ones. The lantern is barrel-shaped with a footstand and conical top surmounted by a vertical handle. The barrel portion is perforated to allow the smoke to escape and to ventilate the lantern. In addition to these holes there is an opening on one side about two inches square, to allow the insertion of the lamp and to direct the beam of light. This opening was never covered. The lantern was originally of a dark brown color, but it has been reduced to a smoky blackness by exposure to smoke and soot.

Bronze Head of Septimius Severus.—*The Illustrated London News*, April 21, 1928, p. 675, shows a photograph of the head of a statue of Septimius Severus recently discovered at the town of Kythraea in Cyprus. Fragments of a nude statue were found with the head, which is heroic in size. The emperor was probably represented in the form of some divinity.

DELOS.—In *R. Ét. Gr.* Oct.-Dec. 1926, pp. 448-461, MAURICE LACROIX notes the appearance of Dürrbach: *Inscriptions de Delos, Comptes des hiéropes* (Nos. 290-371), Paris, 1926, and discusses certain of the inscriptions, suggesting conjectural emendations. Much of the material deals with prices and measures of building materials and with the proper names of the inscriptions.

A New Votive Relief.—R. DEMANGEL contributes a note (*B.C.H.* l, 1926, 523-526; 1 fig.) on a relief of two fragments which join, in the museum at Delos. These two pieces have been known for some time; the fragment at the right, in good preservation, was found in the sanctuary of Apollo in 1880, and was described and published, *B.C.H.* xii, 1888, p. 318 f., and pl. XIV; the other and more poorly preserved piece was not discovered till 1903, when it was found among the heap of stones surmounting the ruins of the so-called House of Kerdon. It is described in *B.C.H.* xxix, 1905, p. 47. As joined together, this relief represents Artemis crowning a mortal in the presence of Apollo. The suggestion is made that the mortal may perhaps symbolize the city of Delos itself, though it is not considered the probable solution. A date at the end of the fourth century B.C. is assigned.

DENDRA.—In *The Illustrated London News*, June 9, 1928, pp. 1036-1038 and

1072 (17 figs.), A. J. B. WACE reports on the recent excavations conducted by the Swedish Archaeological Expedition under Professor Persson at Dendra, near Midea, which, like Mycenae and Tiryns, is one of the prehistoric Argolid fortresses. In 1027 a tomb of unusual type was opened. An entrance passage six feet wide and sixty feet long leads straight into the hill-side where the tomb chamber is cut out of a solid rock seventeen feet beneath the surface. At the doorway of the chamber, which had anciently been broken into by robbers, two large stones covered a pit measuring about five feet long, one and one-half feet wide, and three feet deep. In this were discovered thirty-three implements and vessels: bowls, jugs, lamps, tripods, mirrors, spear-head, sword. Some of these most beautiful remains still show the wooden handles attached. In the tomb chamber were a hearth of stone and plaster, stone vessels, steatite lamps, alabaster vases, pieces from a leather helmet, thousands of glass beads, and other objects. No human bones were found. Thus this was apparently the tomb of a hero who had perished away from home and whose relatives had fitted up an unusually elegant abode for his soul, had performed all possible ceremonies of burial, placing in it menhir stones to symbolize the lost body. The tomb belongs around 1300 B.C.

EASTERN MACEDONIA.—Greek Epitaphs.—In *B.C.H.* 1, 1926, 463–468 (3 figs.), M. NIEDERMANN supplements the article of Gavril J. Kazarov (*B.C.H.* xlvii, 1923, p. 275 f.) by publishing three stelae with funerary inscriptions discovered and copied near Prilep in 1924. These inscriptions belong in the Roman period.

Greek Funerary Vase.—GISELA M. A. RICHTER reports that the Metropolitan Museum has just acquired a black-figured loutrophoros 29½ inches high, in an exceptionally good state of preservation. It has a slender egg-shaped body, a wide funnel-shaped neck, and two curving handles. The vase is decorated with the ceremonial scenes which preceded a Greek burial—the laying out of the dead and the lamentations of the mourners. The loutrophoros dates in the sixth century B.C. (*B. Metr. Mus.* xxiii, 2 (Feb. 1928), pp. 54–56 (3 figs.))

A Greek Marble Head of a Horse.—The head of a horse, of fine-grained marble, of unknown provenance, now belonging to Mrs. Chester Beatty, is published for the first time by R. HINKS in *J.H.S.* xlvii, 1927, pt. ii (pp. 218–221; pl.; 4 figs.). With its flat cheeks, characteristic of fifth-century horses, and its concave profile, it appears, when compared with the horse of Selene on the Parthenon and that of Dexileos in the Ceramicus, and with others from Rhamnus and on the “Talos” vase at Ruvo, to be the work of a pupil or follower of Phidias, made somewhere between 420 and 400.

HALIARTUS.—Excavations in 1926.—In *B.S.A.* xxvii, Session 1925–1926, pp. 81–91 (5 figs.; cf. pp. 268–270), R. P. AUSTIN describes excavations which he conducted at Haliartus, March 30 to April 28, 1926. The Acropolis is roughly rectangular, with sides between 200 and 300 metres in length. Remains of fortification walls of five styles exist, the earliest being of the Mycenaean period, the latest of perhaps the Roman Imperial time or even later. The intermediate styles appear only in patches. A Mycenaean entrance was uncovered in the southwest angle. The early Hellenic wall, of squared blocks, may be assigned to the seventh century, the polygonal wall to a time not far from 500 B.C. The most important remains of the later Hellenic (?) wall consist of the foundations of a tower near the southwest angle and a gateway in the west wall. The latest wall must have made almost, if not quite, a complete circuit of the Acropolis; there are remains of several towers on the south and west sides. Near the highest point of the Acropolis considerable remains of a peribolus-wall, of polygonal masonry, in the form of a flattened semicircle, whose greatest length is about 36 metres, were

found. Of the temple within the precinct four courses of the foundation of the west end were found. These show that the width of the temple was just over seven metres. Near the precinct, and approached from it by a flight of four descending steps, are remains of a rectangular building, also built in polygonal style, about 29 m. long and 9 m. wide. It may have been a storehouse. Of the sanctuary itself, pieces of a Doric column-drum of *poros* with a stucco facing, and of mutule-and-gutta fragments in the same material, with traces of paint, give some idea of the style. The date of the temple may be shortly before or after 500 B.C. The evidence from pottery and other small objects indicates an occupation lasting at least from the sixth to the fourth century B.C. This site would repay further excavation.

Hellenistic Epigraphy.—LOUIS ROBERT contributes the third of his series of articles on this subject (for references to the previous papers, cf. *A.J.A.* xxx, 1926, p. 496) in *B.C.H.* l, 1926, 469–522. Eleven groups are given, numbered XIII–XXIII, both inclusive, the numbers following those previously discussed. These inscriptions are none of them new, but a new rendering of the text, or of parts of it, is given in every case. They include decrees of Kolophon, of the Thesalian Confederation, of the Magnesians and the inhabitants of Demetrias, a decree found at Messene, decrees from Athens, an inscription found at Koulakly in the Troad, and decrees from Skepsis and Ilion. Of these the greatest interest is shown in the decrees from Kolophon and Messene, the inscription from Koulakly and the two from Ilion, which are discussed at great length, particularly the text from Koulakly.

Icarus in Vase-Painting.—A few new instances of pictures of Icarus on vases are noted by J. B. BEASLEY in *J.H.S.* xlvii, 1927, pt. ii (pp. 222–233; pl., 7 figs.). Beside the somewhat elaborate scene of Daedalus fastening wings to the shoulders of Icarus in the presence of Athena and possibly Creta, on a very poor, late fourth-century Italiote volute crater at Naples, and the early sixth-century black-figure inscribed fragments found on the Acropolis of Athens, which show Icarus in a sort of flying stride, there is in Oxford a fragment of a red-figure cotyle, also Italiote, and dating about 400 B.C., on which a young man, standing with head turned over his shoulder, is having wings fastened on by another man who is seated behind him; and in New York is a small Attic red-figure lecythus of about 470, showing a winged youth falling or fallen into the sea, and a bird flying down above him. A possible fifth picture of Icarus can be conjectured only, on a fragmentary Apulian calyx-crater, now in the possession of Dr. Scheurleer at The Hague. Here an old man, presumably Daedalus, is kneeling before a king named MINOS, while the queen stands by. Of the two olive branches with fillets, the sign of a suppliant, which lie on the ground, the second one may belong to an Icarus kneeling behind his father, on the missing portion of the vase.

Inscription Regarding Herodes Atticus.—This inscription, first published from a squeeze by P. Graindor in *Musee Belge*, xvi, 1912, was rediscovered by N. SVENSSON in the little village of Bey, near Marathon, and forms the subject of an article (*B.C.H.* l, 1926, 527–535; 1 fig.). The presence of a statue and various architectural remains in the near neighborhood suggests the possibility that Bey may be built on the site of the ancient village of Marathon, birthplace of Herodes Atticus. A photograph of the inscription is given, with a transliteration and commentary. It is composed in elegiac distichs, and commemorates the solemn reception in Athens of Herodes, after his return to Greece, referring to his origin at Marathon.

Miscellaneous Greek and Roman Antiquities Acquired by the Metropolitan Museum.—In *B. Metr. Mus.* xxiii, 3 pp. 78–82 (10 figs.), GISELA M. A. RICHTER reports on the recent acquisitions of the Classical Department of the Museum.

Among the bronzes are the following: a statuette of a youth wearing a himation—an Etruscan piece dated probably in the fifth century B.C.; a handle of a jug of Greek or Etruscan origin; a rare statuette of a horseman of the late archaic period; part of a statuette of a bearded man wearing a diadem, perhaps representing Zeus; an Etruscan mirror of the fifth or fourth century B.C., with an engraving illustrating the story of Perseus and the Graiai (this mirror is published in Gerhard, *Etruskische Spiegel*, Vol. V, pl. 66); a statuette of a girl wearing a Doric Chiton; a large statuette of a nude bearded man of the Hellenistic period, probably intended to represent Poseidon or a river-god; part of a statuette of Herakles of the Hellenistic or Roman period; and a statuette of a cock also of the Hellenistic or Roman period. The newly acquired terracottas comprise three statuettes: a seated deity of primitive type, from the Schliemann Collection; a graceful Tanagra statuette of a girl dressed in chiton and himation of the second century B.C.; a statuette of a girl, evidently a doll, and a diminutive oinochoë, also a toy. The acquisitions also include three terracotta antefixes from roofs of buildings. Three examples of Millefiori bowls of the Roman period were added to the Museum's collection, also several noteworthy fragments of mosaic glass, a gold plated bracelet (a typical piece of Greek jewelry of the third century B.C.), a beautiful Roman cameo of sardonyx and a carnelian ringstone previously published by Furtwängler, *Die Antiken Gemmen*, pl. XXII, 48.

OLYNTHUS.—In *The Illustrated London News*, May 26, 1928, pp. 948-949 (10 figs.), C. T. SELTMAN reports on the excavations at Olynthus in Chalcidice begun in February, 1928, on behalf of the Johns Hopkins University by Professor David M. Robinson, assisted for some time by Mr. Seltman. An agora, a factory for terracottas, and a considerable residential district have been excavated. The agora is a large rectangular market containing cisterns and pits lined with cement which were used to store water and grain. In the terracotta factory were found many moulds as well as finished ware. The residential area proves to be very interesting. The houses of the wealthy citizens of Olynthus consisted of a court paved with cobble stone in the centre, around which were numerous rooms. Some of these houses probably had two stories. The central room was very elegant. Remains of terracotta water pipes, pottery bath tubs, and other features of bath-rooms are abundant. More than a thousand coins have been found of which about 70 per cent are reported to be Olynthian. Also many leaden sling-shots have been discovered.

The Progress of Greek Epigraphy in 1925-1926.—In *J.H.S.* xlvii, 1927, pt. ii (pp. 182-217), M. N. TOD gives a very complete summary of discoveries and discussions of Greek inscriptions for the years 1925 and 1926, with full references to the places of publication. The sections are: General; Attica (three periods); the Peloponnese; Central and Northern Greece; Macedonia, Thrace and Scythia; the Islands of the Aegean; Western Europe (including Italy); Syria and Palestine; and Africa, the section on Egypt being reserved for the *Journal of Egyptian Archaeology*. Among the important pieces of work noted are: West and Meritt's studies of the Athenian tribute quota lists of the fifth century; A. Wilhelm's restoration and discussion of fourth- and third-century Athenian documents; the publication by A. M. Woodward of the inscriptions on the theatre at Sparta; additions to the inscriptions of Boeotia, by N. G. Pappadakis; the publication of a large number of inscriptions from Delphi, which include a signature of the sculptor Ergotimus and a revised text of the much-debated Roman law about the suppression of piracy (whether of the time of Marius or of Pompey); A. Maiuri's Sylloge of the inscriptions of Rhodes and Cos, which include references to a Rhodian Library and a partial list of works contained in it; an epigraphical study of Greek legal matters

in Sicily and Lower Italy by V. Arangio-Ruiz and A. Olivieri; B. Haussoullier's publication of the accounts of the rebuilding of the temple of Apollo at Didyma; the collection by various persons of inscriptions in Phrygia (both Old and New Phrygian), Galatia, and other districts of Asia Minor; the publication of the inscriptions found by F. Cumont at Douro Europus on the Euphrates, together with some documents on parchment and a list of Black Sea towns written on a leathern buckler; and a rich series of inscriptions from Cyrene, dealing with constitutional, economic, religious, and topographical, as well as personal matters.

SPARTA.—Excavations in 1926.—In *B.S.A.* xxvii, Session 1925–1926, pp. 173–254 (4 pls.; 12 figs.; cf. pp. 262–266), A. M. WOODWARD describes the excavations carried on at Sparta in the spring of 1926 by the British School at Athens. The work in the theatre is described and discussed in detail. The main results in 1926 are: (1) the completion of the uncovering of the stage-buildings, and the location of the street running east and west behind them; (2) the excavation of the area east of the stage, down to its marble pavement, by uncovering a wide strip from the east wall of the stage to the foot of the external staircase previously described; (3) the clearance of a strip along the west parados as far as the east face of the projecting bastion—which did not, as had been assumed, carry a staircase similar to that in front of the east retaining wall—and the partial clearance of the outer southwest angle of the western retaining wall. Some previous assumptions have been modified, and many details of construction have been made clear, by these excavations. After the Pre-Roman period alterations or additions were made in the theatre at eight different times. The theatre was probably not used later than about 400 A.D.

The most interesting single object discovered is a splendid archaic pithos which was found in the building behind the *scaenae frons*. It is about 0.80 m. in height, and the ornamentation falls into two parts: a heavily moulded neck and shoulder, with rows of beads, tongue patterns, and channels, and a frieze in relief on the belly of the vase. Below a band of vertical hatching is the main frieze representing in low relief two two-horse chariots driven at a walk to the left, with an armed hoplite walking behind each. The charioteer is bare-headed and beardless; his hair apparently falls in long plaits in front of his shoulders; his short chiton and his himation are decorated with a finely incised maeander. The hoplite behind each chariot is bearded and wears a crested helmet, carries a spear and round shield, and is girt with a sword. The legs and feet are missing, as is the near wheel of each chariot. This decoration covers only the front half of the pithos, the rest at this level being blank. Below the frieze is a hatched strip, then a band of inverted tongue pattern, then a triple horizontal line, below which the surface is damaged. Similar pithoi from Sparta are known from fragments only. There is now no doubt that they are of Spartan workmanship.

The inscriptions published include fragments from the east parados wall which join inscriptions already published (C 6, 7; E 9; E 15; E 20), new inscriptions or fragments from the east parados wall (E 28–E 46), inscriptions *in situ* at the east end of the external staircase (F 1–4), other lists of magistrates, statue-bases, etc., from the theatre (31–34 and a new fragment of 20), miscellaneous dedications (35–37), and, from the Acropolis, three inscriptions, all, apparently, of the sixth century B.C. (38, a stele bearing a dedication to Athena; 39, a *halter* bearing a dedication to Athena; 40, a fragmentary list of names). The content of the inscriptions found in the theatre is similar, and complementary, to that of those previously published. One of them (F 3) furnishes the first certain epigraphical evidence for the priesthood of Zeus Olympios at Sparta.

The work on the Acropolis is briefly described on pp. 264–266. The excavation

of the area between the Chalkioikos Sanctuary-wall and the back wall of the *cavea* was almost completed, and just to the south of it the foundations of a building were discovered which seems to have been in use from the seventh to the fifth century B.C. Much Laconian pottery was found just to the north of these foundations. Other interesting "finds" are: a piece of archaic terracotta relief representing Odysseus and the ram; a small, gaily painted votive shield of terracotta; two marble *halteres* (one with dedication to Athena); piece of a marble arm almost certainly from the statue of "Leonidas"; small pieces of drapery, of a shield, and a snake's head, all showing traces of paint, which suggest a marble Athena statue of the early part of the fifth century; and a small fragment of marble relief showing a charming archaic head of Athena. A few pieces of Mycenaean pottery and of a coarse local ware were also found here. East of the Chalkioikos several fragmentary inscriptions and remains of many houses of later Imperial times were found, but no definite evidence for a direct entrance from the Acropolis to the theatre appeared. An incomplete ivory relief, showing a man leading a horse, is the first ivory relief found on the Acropolis. Still farther east the plan of the Byzantine basilica was successfully elucidated.

VARDARÓFTSA.—Excavations, 1925, 1926.—In *B.S.A.* xxvii, Session 1925–1926, pp. 1–66 (22 pls., 41 figs.; cf. pp. 266–268), W. A. HEURTLEY and R. W. HUTCHINSON report on the excavations at the Toumba and Tables of Vardaróftsa, Macedonia, carried on by the British School at Athens. This part of the report deals with the Toumba. Here remains of twenty-two successive settlements are distinguished, which are divided into five periods, A, B, C, D, E. Comparison of objects (chiefly pottery) found here with those found at other sites in Macedonia and in more distant regions lead to the following approximate dates for these periods: A, 3000–2000 B.C.; B, 2000–1700; C, 1700–1050; D, 1050–350; E, 350 to some time after 250 B.C. Until the place became thoroughly Hellenized in the fourth century, the changes in the pottery show continuous development, though this is affected at various times by Danubian and southern influences. In addition to pottery, objects of metal, stone, bone, and terracotta were found, and every period is represented by some indication of buildings. The origins of the culture were Anatolian. The people were pastoral, agricultural, and peaceful. They were also hunters. In Period B the influence of the Danubian culture is noticeable, and in Period C there seems to have been extensive emigration due to the pressure of Mycenaeans from the South and Danubians from the North; but a remnant remains to occupy (or reoccupy) the site. The various stages of Hellenic influence are reflected in the pottery. The excavations of the 'High Table' will form the matter for a later report, but a brief statement by W. L. C (uttle) (pp. 267–268) tells that the earliest settlement was post-Mycenaean, that above this were two more pre-Greek settlements distinguished by remnants of daub-and-wattle houses, and that above these was a thick layer of clay, laid down not far from 400 B.C. After this the objects found are Hellenic, except that a local variety of pottery, called 'scraped ware' held its own for a time against the imports from Attica.

ITALY

Archaeological Work in Italy in 1925–26.—A very complete summary of archaeological discoveries and studies in Italy in the year 1925–1926, based both on published material and on personal communications, is given by G. KASCHNITZ-WEISBERG in *Arch. Anz.* 1927, pt. 1–2 (cols. 83–161; 11 figs.). The sites explored and discussed range, as usual, from Neolithic times to late antiquity, and are classified geographically from Istria and Gallia Transpadana west and south through the peninsula to Sicily, Sardinia, and Tripolitana. Improvements in many

museums through rearrangement are noted. An important step toward systematizing work in Etruria and safeguarding the monuments, is the formation of a "Comitato permanente per l'Etruria" which has begun the publication of its *Studi Etruschi*. In Pompeii, beside the Greek bronze ephebus (see *A. J. A.* 1927, 1, p. 112), the Oscan wall-paintings and inscriptions in another house on the via dell'Abbondanza are noteworthy. At Girgenti, excavations on the south side of the temple of Olympian Zeus have recovered five telamones, which with the one already lying above ground are found to have stood against the outer wall between the half-columns of the pseudo-peripterus, as conjectured by Puchstein. Among the objects illustrated are a bronze statuette of a warrior and two bronze grotesques from the Casa dell'Efebo di Bronzo in Pompeii, and a fine marble head of Zeus from the temple at Cyrene identified by an inscription as the temple of Zeus, which is published in the first number of the new periodical *Africa Italica*.

Epigraphic Bulletin.—In *R. Arch.* xxvi, 1927, pp. 347-409, R. CAGNAT and M. BESNIR give a review of epigraphical publications in 1927 relating to Roman antiquity. They publish the text of one hundred and eighty inscriptions, thirty-four of which are in Greek, the rest in Latin, with brief comments. Indexes are added, pp. 410-424.

COMMACHIO (Reg. VIII).—In *Not. Scav.* iii (1927), pp. 143-198, A. NEGRIOLI, continuing the account in *Not. Scav.* for 1924 (see p. 282, fig. 1), gives a preliminary report of the campaigns of 1924 and 1925 in the great Etruscan necropolis at Valle Trebba. In those two years 239 tombs were found, making a total of 460. Of the new ones, 129 were for inhumation, 96 for cremation, and 14 contained no remains from which a conclusion could be drawn. Among the numerous finds were several fine vases with representations of the combat of Polydeuces and Amycus (on a badly damaged pyxis), the slaying of Cassandra, the myth of Peleus in an unusual form, the birth of Dionysus, the myth of Talos and the Argonauts, and Amazons. There were also vases in the form of animals and birds, and a "flesh-fork" of an unusual form with eight prongs.

ETRURIA.—In *Not. Scav.* iii (1927), pp. 198-204, E. GASPERI-CAMPANI gives an account of sundry chance discoveries in 1926 at Florence in the Piazza S. Giovanni, Via del Corso, Piazza S. Firenze and elsewhere, including the remains of an arch.

Roccalvecce.—In *Not. Scav.* iii (1927), pp. 368-369, R. PARIBENI reports the discovery of a lead water-pipe with the name of King Theodatus (534-536), which was taken to the National Museum in Rome. The course of the aqueduct to which it belonged could not be traced.

Fiano Romano.—In *Not. Scav.* iii (1927), pp. 370-371, R. PARIBENI reports the discovery of a vase with simple line-decoration and the Faliscan inscription *tulate tulas urate*, which he takes to be personal names.

FORMIAE.—In *Not. Scav.* iii (1927), pp. 434-449, G. SPANO reports the discovery of various structures. In the district called Vendicio a large room belonging to a Roman villa was found. It has a *suspensio* of an unusual form, which may have been for heating the room, or perhaps merely to protect it from dampness. The room had an outlook on the sea and its axis, if prolonged, would strike the island of Pithecussae (Ischia). Ing. Jacono cites some interesting examples of similar arrangements. Spano dates the room a little before the middle of the last century B.C. and thinks it possible that it may have belonged to the notorious Mamurra, the *decoctor Formianus* of Catullus. On the via Vitruvio remains of a building of the late imperial period were found, with architectural and sculptural fragments, and between the railway station of Gaeta and the sea, remains of a villa of the first century of the Empire.

GUBBIO.—In *Not. Scav.* iii (1927), pp. 367-368, R. PARIBENI reports the dis-

covery, near the Roman theatre, of a fragment of an ivory comb with figures of animals in relief, apparently from a hunting scene or a *venatio*. The comb belonged to a late period, being similar in form to those found in Gothic and Lango-bardic tombs in Italy.

ISOLA FARNESE.—In *Not. Scav.* iii (1927), pp. 371–372, R. PARIBENI publishes a marble tablet from Quaranta Rubbia in Veii, containing a dedication to Fortuna, the Penates, and (all) the gods by members of the *gens Cicutia*; also a funerary inscription found at Veii, but now at Prima Porta.

ORBETELLO.—In *Not. Scav.* iii (1927), pp. 204–210, P. RAVEGGI gives an account of finds in the district called Cosano in 1923. These consisted of objects in gold, bronze, lead, and terracotta, and, along the seashore, of remains of *horrea*. During the enlargement of the Communal Cemetery of Orbetello (*id.* pp. 210–214) Etruscan tombs of the fifth century B.C. were found; and at Port' Ercole (Monte Argentario) some tombs of the Roman period (*id.* pp. 214–215).

OSTIA.—In *Not. Scav.* iii (1927), pp. 379–431, G. CALZA publishes the unedited inscriptions from Ostia, to the number of 177. The greater number are fragmentary, but among them are a dedication to Septimius Severus of the year 198, followed by the names of the *caligati* who dedicated it, 328 in number, in 16 *decuriae*; an additional list of 53 Augustales; fragments perhaps belonging to an *album* of the year 173 (see *Not. Scav.* 1909, p. 91); a fragmentary inscription with an account of games at Rome; and a part of the *album* of *cultores Larum et imaginum dd. nn.*, belonging to the inscription published in *Not. Scav.* 1921, p. 235.

PIEDEMONTE D'ALIFE.—In *Not. Scav.* iii (1927), pp. 450–460, A. MAIURI describes the remains of a polygonal wall belonging to Samnite times, and prehistoric remains on Mt. Cila; also various objects in the local museum.

POMPEII.—In *Not. Scav.* iii (1927), pp. 3–83, A. MAIURI, continuing the report in *Not. Scav.* 1919, pp. 232 ff., gives an account of the excavations carried on between March, 1924 and March, 1926. These were along the *via dell' Abbondanza*, especially in *Insula VII* of *Reg. I*. The aim was to uncover all the houses in the *insula*, a design which was partially carried out. A plan of the buildings unearthed up to March, 1926 is given and the article is handsomely illustrated with cuts and plates.

The street on the west, between *Ins. VII* and *Ins. VI*, was found to be closed by a railing at both ends, allowing access only to the large mansion of P. Paquius Proculus. It was thus an *iter privatum*, connected with that house and originally forming a part of it; it was cut out from it, when the house was remodelled by removing the rooms which had originally formed part of the western side of the atrium. The road, which is not at the same level as the *via dell' Abbondanza*, varies in width from 2.60 m. at one end to 3.85 m. at the other.

At the opening of the street on the eastern side, between *Ins. VII* and *Ins. VIII*, is a large *ara compitalis*, on which is a small quadrangular altar with a representation of two serpents of unusual length, advancing in many coils towards the altar between them. The street to the south of *Ins. VII* was not reached, because that *insula*, as well as *VIII*, turned out to be of considerably greater depth than *VI*, owing to an abrupt bend towards the south by the *via del Tempio d'Iside*; moreover, exploration in that direction was temporarily checked by a huge mass of earth from earlier excavations, which had added a depth of 5 or 6 metres to that of the débris from the eruption of 79.

A partial description of the buildings facing on the *via dell' Abbondanza* was given in *Not. Scav.* for 1911 and 1912, so far as they had been explored at the time. They illustrate the encroachment of places of business upon dwellings, being a complex of shops and houses of a modified and restricted plan, due to the trans-

formation of some of their rooms into booths. Additional space for their occupants was gained by a second story and by so-called balconies across the front of the houses. Some of the rooms are decorated with paintings in the Fourth Style, and a number of graffiti and small objects of different kinds were found. The most interesting house is No. 7, which is entered by *fauces* of unusual length, due to the abandonment of two large rooms in the front of the house to commercial uses. The fall of a considerable part of the stucco of the *fauces* and *vestibulum* revealed an earlier stratum with rough figures and traces of Oscan inscriptions. Over a fleeing horseman is the name *Spartacus*, and above his pursuer a mutilated inscription which may perhaps be read as *Felices Pompeians*. The dining-room contains a number of interesting pictures: The Flight of Icarus, Hercules in the Garden of the Hesperides, The Rescue of Andromeda, and Polyphemus and Galatea. Among the objects found in the house are two lunate tiles with Oscan inscriptions assigned to the first century B.C., shortly before the Social War. The owner was apparently *Amandus sacerdos*, whose name appears in an election notice at the entrance of the house and in two others on neighboring buildings.

The rest of the insula, so far as it has been uncovered, is occupied by a large mansion, bounded on the west by that of P. Paquius Proculus, to which the name of the House of the Bronze Ephebus has been given; see *A.J.A.* xxxi, p. 112. It was formed by joining two houses that were formerly distinct, and it had three entrances on the eastern front, one of which had been permanently barred up; of the other two, one seems to have been for the use of the family, the other for guests. The rooms are decorated in the Fourth Style, and there are several handsome pictures: Perseus and Andromeda, with Perseus showing the reflection of Medusa's face, Apollo and Daphne, Narcissus at the Fountain, Mars and Venus, and others. In the garden is an open-air dining-room, near which is a circular base, on which the Bronze Ephebus perhaps stood. The room is decorated with pictures of poor coloring and slight artistic merit, but of great interest, representing scenes in Egypt at the time of the floods of the Nile. Among them is the representation of a Pygmy slave working a *cochlea*, and this is made the subject of a valuable excursus by L. Iacono (pp. 84-89), entitled "*Della cochlea di Archimede nella descrizione Vitruviana e in un dipinto pompeiano.*"

The inscriptions are published by M. Della Corte (pp. 89-116). They include electoral notices, announcements of gladiatorial contests, three convivial distichs with apices over some of the long vowels, and many others. Among the most interesting is an *index nundinarius*, in which the days of the week are designated by *dies Sat.*, *Sol.*, etc., an unusually early occurrence of these names. They are followed by the places where the markets are to be held and by the days of the month.

Besides the Ephebus, a number of statues, statuettes and other objects in bronze and marble came to light.

Silver Cup from Pompeii.—*The Illustrated London News*, April 28, 1928, p. 731, shows a silver cup recently discovered in good state of preservation and of excellent workmanship. The cup exhibits in relief a contest between tritons and sea monsters. Professor Maiuri is inclined to the belief that the work came from the shop of a Pergamene or Rhodian silversmith in the second or first century B.C.

RIVA DI TRENTO (Reg. X).—In *Not. Scav.* iii (1927), pp. 117-142, P. MARCONI describes the discovery of a prehistoric fortress on the hill of S. Bartolomeo, at the north end of the valley of Riva, between Arco and Varone. A Roman tomb and a stratum containing prehistoric remains were first found. The excavations which followed revealed four strata, modern, mediæval, and Roman, the Bronze age, and the period of pile-dwellings, below which was solid rock. The first two

layers yielded few and unimportant remains; the others, a great quantity of vases, stone weapons and implements, and articles in bone and horn. Fortification walls were also found, which originally surrounded the upper terrace of the hill. There follows an account of earlier prehistoric finds in that neighborhood.

Roman Bulla.—In *Bull. Roy. Ont. Mus.*, 7 (March, 1928), pp. 9-10 (2 figs.), J. H. ILLIFFE records the Museum's acquisition of a Roman bulla of blue glass paste and gold. The design is a Gorgoneion, somewhat similar to the Gorgoneion on the Tazza Farnese in Naples. The disk of blue glass paste is set in a frame of thin gold. The gold back is ornamented with intersecting circles and a nautilus pattern of fine gold wire.

SARDINIA.—Aggius (Sassari).—In *Not. Scav.* iii (1927), pp. 461-462, A. TARAMELLI reports the discovery by workmen of a hoard of Roman *denarii* in the strada di Bardesi, of which eighteen were recovered. They range in date from 200 to 2 B.C., and are common varieties, even for Sardinia.

Mara Calagonis.—In *Not. Scav.* iii (1927), pp. 252-261, A. TARAMELLI reports the discovery near the site of ancient Calagonis of an irregular slab in two pieces, containing on one side a complete Christian inscription, and on the other, part of a pagan inscription of the time of Severus and Caracalla. The date of the former, which contains unusual abbreviations and the spelling *aeclesiae*, is uncertain, since it ends with *ind (ictione)* without a numeral, but the lettering points to the fourth or fifth century. The latter belonged to a public building (*thermae Rufianae*), restored by the procurator M. Domitius Tertius, who is otherwise known (*C.I.L.* X, 8825) except for his cognomen. A Rufus who was *quattuorvir iure dicundo* and *quinquennalis* at Caralis is known from *C.I.L.* X, 7587.

SPINA.—Discovery of Attic and Etruscan Pottery.—In *The Illustrated London News*, February 25, 1928, pp. 296-297 (8 figs.) is given a brief report by FEDERICO HALBHERR of the discovery of a very rich necropolis at Valle Trebba, near Ravenna. Upwards of five hundred tombs have yielded Greek vases of many types and great artistic merit. Amphorae, hydrias, cups, bowls, craters, belonging to the fifth and the fourth centuries B.C. and showing red figures on black ground have been found. Here in the delta formed by the mouths of the Po a rich Greek commercial town called Spina was developed, with which Athens kept in close business contact. To this section of Italy went many colonists from overcrowded Athens, and much of the Athenian grain supply was derived from the valley of the Po. For the grain and cattle imported from here Athens paid with manufactured products, especially pottery. The cemetery has by some been regarded as Etruscan, though the slight non-Greek elements could be accounted for as being infiltrations that had worked their way into this Greek center. Spina had already in the time of Strabo been so far covered by the alluvial deposits left by the Po that it was but "a small hamlet." By now a strip of land a mile wide has been made at the mouth of the river.

A Syracusan Dekadrachm.—In *Bull. Roy. Ont. Mus.*, 7 (March, 1928), pp. 6-7 (2 figs.), J. H. ILLIFFE announces the Museum's acquisition of a Syracusan Dekadrachm signed by Euainetos. The obverse side of the coin has around its edge the words ΣΥΡΑΚΟΣΙΩΝ above, and ΕΤΑΙΝΕ[ΤΟΣ] below. This side contains a female head, perhaps that of Persephone or of Nike, which is surrounded by four dolphins. On the reverse side is a quadriga with horses galloping, driven by a charioteer holding in one hand a goad and in the other the reins. He is being crowned by Nike, who flies above. This is a product of the highest quality of Greek numismatic art.

TERRACINA.—In *Not. Scav.* iii (1927), pp. 432-433, E. STEFANI reports the discovery, near the street leading from the railway station to the porta Romana

and about 45 m. from the latter, of a piece of the substructure of the *via Appia antica*, outside of the *porta Romana*. It is about 7 m. in length, of polygonal masonry in the local limestone.

TIVOLI.—In *Not. Scav.* iii (1927), pp. 215–249, U. ANTONIELLI reports the discovery in the district known as *Acquoria* (see *Not. Scav.* 1926, p. 214) of a votive trench belonging to the republican period. It contained a great number of offerings in *terra cotta*, including models of loaves or cakes, and in iron, bronze, copper, and stone. Of special interest is the money, which is described by S. L. Cesano (pp. 249–256). It consists of 125 pieces of *aes rude* and one of *aes signatum*, the first appearance of this latter form among votive offerings. It is a rectangular bit weighing 174.50 gr. and measuring 40 by 35 by 25 mm., having on one side the so-called *ramo secco* and on the other two irregular and nearly parallel furrows. There were besides four Romano-Campanian coins, 12 Roman coins with the ship's prow, and 10 from *Magna Graecia*.

In *Not. Scav.* iii (1927), pp. 373–374, R. PARIBENI publishes the head of a girl in Greek marble, found in Hadrian's villa. The head, which is of life size, has lost the greater part of the nose and the lips and eyelids are slightly damaged. The treatment of the hair shows imitation of a bronze original, and Paribeni regards it as a replica of a Peloponnesian work of the middle of the fifth century B.C., of which there are examples in the Ny Carlsberg and Lateran museums, at Canea, and in the Torlonia Collection. The original was attributed by Carlo Anti to Calamis.

In the region called S. Anna, Paribeni (pp. 374–378) reports the discovery of ancient buildings and refuse from a manufactory of vases. The latter includes one entire mould and fragments of others, with geometric and floral designs, figures of animals, human masks, etc. The vases imitated the metal technique and are assigned to the last century of the republic.

FRANCE

A Magdalenian Bison.—In *R. Arch.* xxvii, 1928, pp. 1–4 (pl.; fig.), E. PASSEMARD and H. BREUIL publish a finely carved figure of a bison. It is composed of two parts which were found in 1914 and 1925 in widely separated galleries of the cavern of Isturitz (Basses Pyrénées). The pieces were put together in 1925 by H. Breuil. The length of the entire carving is 0.22 m., and it is the largest known Magdalenian engraved bone with cut-out edges. It belongs to the middle of the Magdalenian period.

A Potter's Signature.—In *R. Arch.* xxvii, 1928, p. 209, PIERRE WALTZ publishes a potter's signature borne by a red vase found at Clermont-Ferrand. It reads AISIII M, i.e., *Aisiii m(anu)*. This signature, in slightly different forms, is published in *C.I.L.* XIII, No. 10010, 72a, b. Two letters I are often equivalent to an E, and AI is a variant of AE. The potter's name would, then, be Aeseus or Aeseius, or, to employ the more usual form, Aesius.

A Roman Hoard at Limoges.—In *Revue Numismatique* xxx (1927), p. 113, is a notice of a find of Roman *denarii* at Limoges in 1926, dating from Antoninus Pius to Valerian.

GERMANY

Casts of the Pergamene Frieze.—At the time of the installation of the Pergamene frieze in the new Pergamene Museum, in Berlin, new casts were made of certain of the slabs of the north and south sides, including the bull-giant and the Helios group. Copies can be ordered from the cast foundry of the Berlin Museums. *Arch. Anz.* 1927, pt. 1–2, col. 195.

Early Stone Age in Westphalia.—In *Mannus* xx (1928), pp. 36–43 (6 figs.), JULIUS ANDREE continues a series of articles on remains of the early Stone Age in Westphalia, with a fifth instalment treating of hitherto unpublished flint utensils from the Feldhof Cave in Hönnetal. A bibliography of twenty items closes the article.

HUNGARY

Gold Find of Ofeherto.—In *Archaeologiai Értésítő*, new series, xl (1923–1926), pp. 241–245, LUDWIG KISS reports the discovery at Ofeherto of a gold armlet and some gold wire which seem to come from the first half of the first millennium B.C.

Prehistoric Cemetery at Kosd, Committee of Nograd.—In *Archaeologiai Értésítő*, new series, xl (1923–1926), pp. 235–245, A. FETTICH reports that in 1926 several graves were discovered at this place. The graves seem to date from the beginning of the Iron Age, the La Tène period, although there are some signs of Neolithic origin in some of the articles.

ALBANIA

Reliefs and Inscriptions in the National Museum.—The new national museum in Tirana, begun in 1923, boasts some good things. C. PATSCH, in *Jh. Oest. Arch. I.* xxiii 2 (1926), Beibl., col. 209–230, comments on three reliefs of Hermes Psychopompos, and gives text and description of ten sepulchral inscriptions.

TURKEY

Hippodrome at Constantinople.—A British expedition spent four months in 1927 in excavating and studying the Hippodrome at Constantinople. The dimensions have been ascertained as 117 m. x 470 m. The level in its latest period of use was 4.25 m. below the present surface level. It is found that there never was a regular *spina*, but only a series of isolated monuments along the middle line. Of the three which remain, the so-called Obelisk of Porphyrogenitus was originally fitted as a fountain, and the serpent column of Platea, which seems to have been moved to its present position at the close of the Byzantine period, had also been used as a fountain. At the end of the Hippodrome toward Santa Sophia, where it joins the Baths of Zeuxippus, a fine Roman panel relief of a female figure representing Thalassa was found. At the other end, much of the *sphendone* was found to be intact, with part of the outer corridor. (*J.H.S.* xlvi (1927), pt. ii, pp. 261–263; 2 figs.)

GREAT BRITAIN

ABERDEENSHIRE.—In *Ant. J.* viii, 1 (Jan. 1928), pp. 69–75 (4 figs.), W. DOUGLAS SIMPSON reports on the excavations of Kindrochit Castle, in Braemar, Aberdeenshire. The work revealed remains of two distinct periods, the older building being incorporated with the newer one. The older castle probably dates in the fourteenth century, while the newer one dates not much earlier than 1500 according to evidence revealed by architectural fragments. A silver-gilt Highland brooch and a fourteen-sided jet button were discovered; also architectural objects and bone deposits.

ABINGDON, BERKS.—In *Ant. J.* vii, 4 (Oct. 1927), pp. 438–464 (8 figs.), E. THURLOW LEEDS writes about the excavation of a Neolithic site at the above-mentioned place. Flint scrapers, serrated flakes, borers, axes, arrow-heads, daggers, knives, and other objects were found in considerable quantities, as were also stone and bone implements. The pottery was very fragmentary and for the most part of a very primitive type, consisting of clay paste mixed with a high percentage

of grit. Most of the vessels had round bottoms. Decoration is either wholly absent or very elementary. Apparently the makers of this ware belonged to a stock that had connections with western France and the Iberian peninsula.

Archaeology in Ireland.—Archaeology in Ireland has suffered the deaths of Dr. Walther Bremer, Keeper of Irish Antiquities in the National Museum, and Mr. Henry Saxton Crawford, a noted authority on Celtic art. The excavation of the ancient sanctuary at Uisneach, near Mullingar, is practically completed. It was a La Tène site, with probably a Bronze Age background. (*Ant. J.* viii, 1 (Jan. 1928), pp. 98–99.)

BACUP.—**Flint Adze.**—An adze 7 inches long, $1\frac{1}{2}$ inches wide at the butt end and a sharp cutting edge at the other end $2\frac{1}{4}$ inches wide has been found on Tooter Hill, Bacup. (*Ant. J.* viii, 1 (Jan. 1928), pp. 90–91 (1 fig.))

CHESHIRE.—**Axe-Hammer.**—In *Ant. J.* vii, 4 (Oct. 1927), pp. 522–523 (1 fig.) is announced the discovery of an axe-hammer of the Bronze Age which is in good state of preservation.

CHESTER.—**Roman Fort in Deanery Field.**—In *Ann. Arch. Anth.* xv, 1–2 (May, 1928), pp. 3–32 (13 pls.; 5 figs.), ROBERT NEWSTEAD continues the report (cf. *Ann. Arch. Anth.* xi, 59–86) on excavations at the above-mentioned site. The foundation walls and the floors and hearths of the individual rooms or huts have been carefully laid bare. Numerous remains were found, including: Samian and other pottery of finer quality; Roman coins of Vespasian, Domitian, and Antoninus Pius; fragments of bronze and iron; bits of glass; gaming pieces or counters; a small uninscribed altar; crucibles and other objects connected with the working of lead; a bronze finger-ring showing representation of Isis and Serapis; iron knives; a rare iron fishhook; sheets of lead, and other similar objects. Several of the remains shed considerable light on Roman life. The site in question was occupied as early as the Flavian period, and there was a continuous occupation to the end of the fourth century, the earlier period being the more intense. Additional search on an adjoining site is announced.

CREDITON.—**Roman Lead Seal Impressions.**—Four lead seal impressions are reported as having come from Syracuse and now being in the possession of Colonel Montague, of Crediton. One, of a type hitherto not described, shows on the obverse the letters O F P and on the reverse E Q S. The following interpretation is suggested: "Officium Praefecti; reverse, Equitum Singularium: that is, The Office of the Commandant of the imperial select cavalry body-guard." (*Ant. J.* vii, 4 (Oct. 1927), p. 529)

DORSET.—**Roman Pavement.**—A beautiful Roman mosaic pavement was found at Dorchester, with very skillful color-treatment. It is very similar to the Corinium mosaic of the second century A.D. described in *Antient Corinium (Cirencester) Remains of Roman Art*, second edition, 1851, p. 38, pl. VI, fig. 2. (*Ant. J.* vii, (Apr. 1928), pp. 237–238 (1 pl.))

ESSEX.—Miss NINA FRANCES LAYARD reports (*Ant. J.* vii, 4 (Oct. 1927), pp. 500–514 (8 figs.)) on the excavation of a late palaeolithic settlement where many flints shaped by human hands and also remains of hearths were discovered, numbering about 500 implements.

HADDEN'S HILL.—In *Ant. J.* viii, 1 (Jan. 1928), pp. 87–89 (2 figs.), R. C. C. CLAY reports on the excavation of an oval barrow in Hadden's Hill Plantation, Bournemouth. Sixteen burials were found, six of which were by cremation in urns, the remainder by simple cremation, all of which may be assigned to the late Bronze Age, being probably contemporary with the Pokesdown urnfield, one mile distant.

KANOVIUM.—Work has been continued on the Roman fort of Kanovium, at

Caerhun. Four buildings have been located in the *praetentura*; the south gate has been excavated; in the commandant's house have been found coins of Domitian, Nerva, and Trajan; the *praetorium* has been uncovered; a few potsherds and a coin of Constantine II testify to fourth-century inhabitants, but it is impossible to determine how long the fort was occupied. (*Ant. J.* viii, 1 (Jan. 1928), pp. 104-106)

KENT.—The British Museum has acquired a pedestal-urn found in a cemetery, of the period between Julius Caesar's invasion and the Claudian conquest, situated in Sturry, near Canterbury. Other vase fragments were found here, but in such condition that they could not be restored. (*Ant. J.* viii, 1 (Jan. 1928), 93-94 (1 fig.))

In *Ant. J.* vii, 4 (Oct. 1927), pp. 521-522 (1 fig.) is a brief note announcing the discovery of part of a belt buckle belonging to the close of the Roman period.

Coins.—Fourteen gold coins, twelve of them early British coins imitating those of the Atrebrates, have been found near Westerham. The coins were contained in a hollow flint. They apparently belong early in the first century B.C. (*Ant. J.* vii, 4 (Oct. 1927), p. 526)

Roman Temple.—In *Ant. J.* viii, 1 (Jan. 1928), pp. 76-86 (18 figs.), W. G. KLEIN records the excavation of a Roman temple at Worth, in Kent. The ground-plan of the building is a double rectangle. The walls and floor were of chalk. Parts of a statue cut in stone, some pottery, and a coin from the time of Constantine were found. A model shield of bronze somewhat similar to the Roman *scutum* was also discovered. The pottery found represents two ages: Roman, and Early Iron Age. The author describes briefly some of the pottery and bronze finds.

LANCASTER.—In *Ann. Arch. Anth.* xv, 1-2 (May, 1928), pp. 33-40 (1 fig.), J. D. DROOP and R. NEWSTEAD report on certain trial excavations at Lancaster. The "Wery" Wall was examined, and the evidence discovered points to the conclusion that this wall was probably Roman, was carelessly built, and belongs perhaps in the early part of the second century. Trenches were dug in the Vicarage field and numerous remains, principally pottery, were found.

Roman Remains.—In *Ant. J.* viii, 1 (Jan. 1928), p. 98 is a report that there were found at Lancaster Samian pottery, remains of a clay hearth, Roman wall plaster, silver coin of Nero, and fragments of tiles.

LINCOLNSHIRE.—The Roman tessellated floor which was discovered at Horkstow Hall in 1796 has now been permanently lent to the British Museum. The pavement shows Orpheus surrounded by birds and quadrupeds, a circle with mythological figures, a chariot race with four competitors. (*Ant. J.* vii, 4 (Oct. 1927), p. 524)

LONDON.—**Roman Figurine.**—A pipe-clay bust, probably of Venus, has been found recently in London, measuring $4\frac{1}{2}$ inch high. It was manufactured at Allier (Gaul) or at Cologne. (*Ant. J.* vii, 4 (Oct. 1927), pp. 524-525 (1 fig.))

LYMORE.—An oval-shaped pit-dwelling $6\frac{1}{2}$ feet deep and 5 feet in diameter was found at Lymore, Hants. A beaker $9\frac{1}{4}$ inches high and $6\frac{7}{8}$ inches in diameter at the lip was also found. (*Ant. J.* viii, 1 (Jan. 1928), pp. 93-94 (1 fig.))

NOTTINGHAM.—**Paleoliths.**—A number of Drift implements collected from a gravel-pit at Beeston, Notts, have been presented to the British Museum. (*Ant. J.* viii, 1 (Jan. 1928), pp. 91-93 (5 figs.))

POKESDOWN.—In *Ant. J.* vii, 4 (Oct. 1927), pp. 465-484 (14 figs.), R. C. C. CLAY writes about the excavation in the winter of 1926-1927 of a Late Bronze urn-field at Pokesdown, in Hants. Cinerary urns were found as well as human ashes placed in cists. A leaf-shaped bronze spear-head, eight inches long, was found. The remains of a hearth were also uncovered. The urns are largely of

the barrel-shape and bucket-shape types. The pottery has been placed in the British Museum.

SCOTLAND.—Discoveries During 1927.—Paleolithic remains have been discovered, antlers of young deer, remains of bears, and of other animals. An earth house was discovered at Rennibister, Orkney, in which were human skeletons. (*Ant. J.* vii, 4 (Oct. 1927), pp. 523-524)

SOMERSET.—Bronze Chisel.—The finding of a rare bronze chisel of the late Bronze Age at Ham Hill, South Somerset is recorded in *Ant. J.* viii, 2 (Apr. 1928), pp. 241-242 (1 fig.).

STONEHENGE.—In *Ant. J.* viii, 2 (Apr. 1928), pp. 149-176 (3 pls.; 4 figs.), Lt. Col. W. HAWLEY reports on the excavations at Stonehenge, 1925-1926. About half of the area has been excavated and the ditch gives proof that the site is older than the monument standing on it. Pottery of all ages was found, some as early as the Beaker period, which would place the inception of the monument in the latest part of the Neolithic period. The elevation on the south, formerly considered a barrow, proved to be due to a natural rise of the chalk and perhaps to erosion of the chalk surface to the east of it. The large hole found in the centre of the monument was intended for a stone which would correspond to the one on the rampart to the east of it forming two of the four stations from which lines intersect at the centre of Stonehenge. The Hele stone seems to have been moved from its original position along a groove passing through a broad trench in the direction of its present site beside the monument. The Aubrey holes, which seem to have held wooden uprights, antedate the monument. The foreign stone lintel is still a mystery. The Stonehenge site was a temple, and for a secondary purpose it was an assembly place where priests and military nobles dispensed justice and promulgated laws. It was a well-known landmark and centre for trade.

SUFFOLK.—Bronze Hoard.—A late Bronze Age hoard found at Suffolk includes socketed celts, socketed gouges, a chisel, a lance head, fragments of sword blades, and a piece of linen cloth. (*Ant. J.* viii, 2 (Apr. 1928), pp. 236-237 (1 pl.))

SURREY.—Roman Kilns.—In *Ant. J.* viii, 1 (Jan. 1928), pp. 48-53 (2 figs.), Major A. G. WADE announces that he recognized a Roman pottery kiln in 1926 at Snailslynch Farm, on Terrace C of the Farnham gravels in Surrey. The oven was 6 feet long, 26 inches high, and 5 feet across at its greatest measurement. Burnt puddled clay lined the flues and the oven. About seventy pottery bases were found. Another kiln was found on Terrace B. This one had, in addition to the oven, a drying shed. Broken pots were found here. White slip on the neck and shoulders of the pottery of the former kiln suggest the third century. Pottery from the latter kiln contained no slip.

WEDMORE.—Roman Coins.—A list of 54 Roman coins recently found at Wedmore, Somerset, is published in *Ant. J.* viii, 1 (Jan. 1928), pp. 96-97. Most noteworthy in the hoard are a Laelian coin and one of Carausius coinage commemorating the Fourth Legion.

Wookey Hole and Other Mendips.—In *Ant. J.* viii, 2 (Apr. 1928), pp. 193-210 (25 figs.), H. E. BALCH tells of the exploration of the cave-dwelling at Wookey Hole. Most of the finds were in Romano-British levels. Iron shears, coins, pottery, bronze fibula, bone pins, and jewelry were found together with certain interesting evidence connected with the natural effigy known as "the Witch." Examination of a rock shelter at Ebbor revealed flint instruments of the late Pleistocene period. Soldier's Hole, a cave shelter high in the cliffs of Cheddar Gorge yielded Romano-British pottery, Neolithic flints, and bone instruments of interest.

YORK.—Fourth-Century Wall.—A fortress wall between Bootham Bar and Monk Bar has been excavated. Also, there has been found an early stone barrack

(probably of Trajan's reign). Apparently the earlier fortress was demolished when the construction of the later fortress took place. (*Ant. J.* viii, 2 (Apr. 1928), p. 238)

Finger-nail Decoration.—In *Ant. J.* viii, 1 (Jan. 1928), pp. 98–99, is an illustration of two examples of finger-nail ornament found in the body of the urn as opposed to that kind of decoration on an applied band. Evidence points to the fact that decoration on the body of the urn dates to the Hallstatt period while that on the band belongs to the late Bronze Age.

NORTHERN AFRICA

CARTHAGE.—In *C. R. Acad. Insc.* July–Sept. 1927, pp. 205–210 (1 plate), L. POINSSOT and R. LANTIER report the discovery, at Carthage on the west slope of St. Louis Hill, of a tiny head of a young ephebus carved in wood (like boxwood) and beautifully preserved. The head is in bold relief on a disk and seems to have been applied originally as furniture ornament. The influence of Scopas is felt. The work is by the discoverers assigned to a date before 146 B.C.

Excavations in Libya.—In *Archaeologiai Értesítő*, new series, xl (1923–1926), pp. 38–56, AKOS^v. SZALAV summarizes the excavations in Libya dealing with Tripolis, Sabratha, and Lepsis Magna as known at the end of 1923.

Lacono-Cyrenaic Vases.—In *R. Arch.* xvii, 1928, pp. 50–56 (9 figs.), CHARLES DUGAS supplements the catalogue of Lacono-Cyrenaic vases begun by R. Laurent and himself (*R. Arch.* xx, 1912, pp. 88–105) and continued by J. P. Droop (*J.H.S.*, 1910, pp. 33–34). Bibliographical references to publications of fourteen vases already catalogued are accompanied by some discussion. Thirty-eight numbers (115–152) are added to the list, and several of these are briefly discussed.

NUBIA.—In *Ann. Arch. Anth.* xiv, 3–4 (Oct. 1927), pp. 57–116 (40 pls.), F. LL. GRIFFITH continues his detailed report on the Oxford Excavation in Nubia. A mound at the end of the Meroitic mastaba-field was found to contain a small Christian church apparently dedicated to Saint Isidorus. Two types of Christian tombs were found in the Meroitic Cemetery: (1) usually two or more parallel vaults separated by party walls, built in a pit, the entrance to the tomb being the full width of the vault; (2) a well, giving access to a vaulted chamber. Skeletons, pottery, and other deposits were found in these tombs. A very careful study was made of the protecting spells standing over a brick grave, which is thought to have been a hermit's bed. Skeletons were found in Christian graves at Hathor rock or Nabindiffi. Various Christian sites near Faras were examined and notes made on finds filling up many gaps in previous knowledge of the history of the places.

AZERBAIJAN

Excavations at Yalovlu-Tapa.—In *Materials of the Azgsmuzev* (National Museum of Azerbaijan), i, D. SHARIFOV describes some excavations undertaken at Yalovlu-Tapa, district of Nukha, in the valley of the Turvanchav, in 1926. In the clay bank of a branch of this stream were several caves many of which had fallen in. These were originally intended as habitations, as is evidenced by fire openings which could still be made out in some places. At the entrance to the caves were graves about 1 to 1.5 m. below the surface. In these there were discovered fragments of human bones and a considerable number of clay vessels of various shapes. Those of black clay tended to contain the bones of birds or of animals and seem to belong to the oldest strata. In some graves there were found these vessels together with beads, occasionally of bronze, and finally there was one grave found with an iron ring, apparently the latest of the series. Furthermore,

the later graves seem to have contained pottery of light clay which did not contain birds' bones, so that the continued use of the black clay vessels may have been connected with some religious rites. The vessels are of various shapes, but we may note especially a rather shallow vase resting on three legs and with two ribbon-like handles and vases of the same character but provided with only one foot. The shapes of the pottery are rather rough, but quite diverse, and they contain relatively little decoration. It may be presumed that these are remains of the troglodytes mentioned in Strabo, xi, 5, 6, and 7.

EARLY CHRISTIAN, BYZANTINE, AND MEDIAEVAL

GENERAL AND MISCELLANEOUS

New Specimens of Byzantine Music.—In *B.S.A.* xxvii, Session 1925-1926, pp. 151-172 (pl.), H. J. W. TILLYARD publishes, partly in photographic facsimile and partly in type, a canon for Advent as an illustration of a good manuscript in the Round Notation; he adds a transcription of the whole in our musical notation. He also gives explanations and transcriptions of several specimens given by E. Wellesz in his *Byzantinische Musik* (Breslau, 1927).

EGYPT

Egypto-Arabic Textiles.—In *B. Metr. Mus.* xxii, 11 (Nov. 1927), pp. 275-279 (10 figs.), M. S. DIMAND makes note of the recent accessions to the Museum's textile collection. The fragments were found at Fostat (Old Cairo) and include woolen and silk textiles with tapestry-woven decoration and embroideries, dating from the ninth to the fourteenth century. Four fragments of early knotted rugs are of special interest and importance. The collection shows the continuation of Coptic tradition in Near Eastern art and the rise of a new Arabic style which later influenced European weaving to a high degree.

ASSYRIA AND BABYLONIA

Wall Panels from Samarra.—In *B. Metr. Mus.* xxiii, 3, pp. 85-90 (5 figs.), M. S. DIMAND brings to the attention of students of Oriental art a rare opportunity to study the Mohammedan ornamentation of the ninth century. Four wall panels cast from the originals at Samarra, near Baghdad, have been acquired and are now on exhibition in the Museum. A number of Samarra ceramic fragments and four complete bowls also may be seen in the Museum. The Caliphs of Samarra imported white porcelain made in China as early as A.D. 618-907. Fragments of this porcelain have been found. In the Museum are exhibited Mesopotamian imitations of excellent quality and very like the Chinese pottery.

ITALY

A Lost Work by Cavallini in a Miniature of the Thirteenth Century.—In *R. Arch.* xxvii, 1928, pp. 141-145 (fig.), AL. BUSUIOCEANU publishes a miniature from a manuscript (*cod. Lat.* 461) in the Biblioteca Estense at Modena. It represents the Emperor Octavian and the Tiburtine Sibyl standing before a doorway which is flanked by two two-story towers surmounted by small buildings. Above, in a mandorla surrounded by conventional clouds, is the Madonna seated on a throne and holding the Child on her knees. At each side of her is an angel. Vasari, in enumerating the works of Pietro Cavallini, mentions a fresco in the choir of Santa Maria in Aracoeli which represented this scene. The fresco has disappeared entirely. The newly discovered miniature probably reproduces the lost

fresco, which appears to have been, if not the earliest representation of the legend, at any rate the one which furnished the definitive iconographic type of it.

AGRIGENTO.—*Byzantine and Limoges Goldsmith Work.*—In *Boll. d'Arte* vii (1928), pp. 551–566 (8 figs.), M. ACCÀSCINA publishes some little-known examples of goldsmith work in Sicily. One particularly interesting piece is a portable altar consisting of a rectangular slab of wood covered with a piece of agate in the center, which is surrounded by enameled plaques representing symbols of the Evangelists, Saints, and Christ in Glory. Both the technique and the iconography are Byzantine, and the Latin inscription suggests that the work was done in Italy or Sicily by Byzantine artists; it probably dates from the end of the eleventh or beginning of the twelfth century. Likewise in Agrigento, Sicily, are several Limoges caskets from a single Limoges atelier of the thirteenth century. These, belonging to the first half of the century, show enameled figures on copper; others, from the second half of the century, show a change of technique, the background is enameled and the figures stand out in the metal, thus giving more the effect of sculpture and greater freedom to the artist for originality and artistic creation. Occasionally in Sicily we find native imitations of Limoges work.

BRESSANONE.—*Master Giovanni di Brunico.*—In *Boll. d'Arte* vii (1928), pp. 489–504 (12 figs.), M. M. DELL'ANTONIO publishes new discoveries in regard to the splendid paintings on the vault of the cloister of the cathedral at Bressanone. The style of the work indicates that it was done by the master of the artist who painted the vault of S. Giacomo at Termeno, and an inscription regarding the latter tells us that it was done by the pupil of Master Giovanni of Brunico. This master evidently studied under the earlier painters who worked at Bressanone, but he also shows a Rhenish influence that probably came through manuscript illumination. The work is dated 1417.

IRSINA.—*The Crypt of San Francesco.*—In *Boll. d'Arte* vii (1928), pp. 385–415 (35 figs.), E. GALLI makes the first publication of the frescoes in the so-called crypt of San Francesco at Irsina, the old town of Montepeloso. This semi-subterranean chapel was built, apparently for private use, in the second half of the fourteenth century. An extension on one side of it is a small tomb for the burial of only one, or at most two, bodies. A likely assumption is that the crypt was built by Duke Francesco I del Balzo (1347–1420) and that he used the tomb for the sarcophagus of his father, Bertrando. The frescoes, which date from this period, follow the Giottesque tradition. They are on the whole well preserved, the only considerable damage resulting from dampness and lack of care. Since the middle of the sixteenth century the chapel has been abandoned and has served only as a depository for bones. With this abandonment the stairway leading to the chapel from the church above was filled up. Since the recent restoration of this passageway most interesting frescoes along its walls have come to light, life-size figures of princes descending the stairs and a company of court ladies. Inside the chapel the vaults and walls are covered with ornamental and figure decoration. There are many figures of saints and compositions of the Annunciation, Presentation of Christ in the Temple, Crucifixion, Translation of the Virgin, Coronation of the Virgin, and a few others.

MESSINA.—*Examples of Primitive Sicilian Painting.*—In *Boll. d'Arte* vii (1928), pp. 481–489 (12 figs.), E. MAUCERI publishes some fragments from the ceiling of the cathedral at Messina. The cathedral is now in ruins, but a number of panels and fragments of panels are preserved in the museum at Messina and form the basis of an interesting study of early Romanesque and Gothic painting in tempera on wood. Two periods are represented, the first Norman, with Romanesque characteristics, the other showing an admixture of geometrical Gothic

features with more dominant Romanesque-Byzantine features. The subject-matter of the first group is a primitive symbolism in a setting of foliate designs: there are such motives as the fish, and Jonah ejected by the whale. Figures of Christ and saints are among the subjects of the second group.

VERONA.—*The Fresco in the Tower of San Zeno.*—Recent restorations in the tower of the monastery of San Zeno at Verona have made possible a more satisfactory study of the fragmentary frescoes preserved there. These are in three zones: at the top is an arabesque frieze with grotesque male figures and fantastic animals enclosed in circles; at the bottom is a narrow strip, badly mutilated, with scenes from the chase; in the middle is the widest zone, on which is represented an enthroned emperor, surrounded by soldiers and court dignitaries and receiving the homage of a procession of foreign emissaries. The date of the erection of the tower as well as certain similarities of the fresco with paintings in the neighborhood of Verona place the decoration at the end of the thirteenth century, though one is first struck with the general similarity of the style with that of manuscripts of a much earlier date, even of the eleventh and twelfth centuries. Most of the foreign ambassadors who pay tribute to the emperor are not particularized as to nationality, and the emperor himself is in no sense a portrait; so that, although it is tempting to believe that the monks may have intended to represent here some famous emperor of the past who visited them and granted them special privileges, it seems more likely that they were painting an ideal scene to illustrate the power and universality of the Empire by representing the homage paid an ideal emperor by all the people of the world. They probably used some old illuminations in the library of the monastery as models. (G. GEROLA, in *Boll. d'Arte* vii (1927), pp. 241-258 (17 figs.))

FRANCE

Limoges Reliquary.—The beautiful Limoges reliquary, executed in champlevé enamel, 14½ inches high, and with the dignity and monumental style of Byzantine art has been acquired by the Art Institute of Chicago. The shrine is in the form of the seated Virgin holding the Child Jesus on her knee. She wears a crown. The throne is decorated in front with scroll work and on either side are the Angel and the Virgin Annunciate. (*B.A.I., Chicago* xxi, 6 (Sept. 1927), pp. 73-74 (3 figs.))

GERMANY

BERLIN.—*Gothic Exhibit.*—In *Zeit. Bild. K.* lxii (1928), pp. 1-2 (*Beilage*) (2 figs.), T. DEMMLER publishes some of the examples of sculpture that were shown with the exhibit of mediaeval tapestries in the Berlin Künstlerhaus last spring. They include some fine examples from collectors in Berlin, Frankfurt, and Munich: a wooden group of the Pieta of about 1320; some splendid works by Tilman Riemenschneider, particularly a Madonna and Child; and a beautiful group of the Virgin and Angels, apparently from a Coronation scene, of about 1520, that marks the beginning of a new movement, as Riemenschneider's work marks the end of an old.

DORTMUND.—*The Virgin Altarpiece.*—In *Zeit. Bild. K.* lxii (1928), pp. 12-20 (7 figs.), K. SCHAEFER tells of recent restorations of the Virgin altarpiece that has as long as anyone can remember hung in the gloom of the Choir of the Dortmund church, where in 1720 it was enclosed in the crude frame of a baroque altar. The adaptation of the altarpiece necessitated the cutting down of each of the three panels, so that in the middle panel, for example, the number of Apostles surrounding the death bed of the Virgin was reduced from twelve to four. The wings of the altarpiece represent when open the Nativity and the Adoration of the Magi. Since the restoration it is found that the Annunciation and the Coronation are painted

on the outside of the wings. The work fits into German painting shortly before Stephan Lochner. Stylistically it can be dated about 1420 and the dependence of a dated work upon it fixes a *terminus ante quem* of 1424.

DRESDEN.—Fifteenth- and Sixteenth-Century Engravings.—In *Zeit. Bild. K.* lxii (1928), pp. 1–11 (13 figs.), M. LEHRs writes of the most noteworthy acquisition of wood and copper engravings made by any public collection in many years. It is a gift, largely of fifteenth- and sixteenth-century prints, presented to the Dresden Kupferstichkabinett by "Haus Wettin" from the collection of King Friedrich August II (1797–1854), a lover of prints who was in a position to get the best, starting his collection in 1817. Among the collection are a number of important examples by Master E S, the Monogramist B N, Master C. Cz., Israhel van Meckenem, and Lucas van Leyden.

The Madonna with St. Ann by Gerhaert von Leyden.—In *Berliner Museen* xlviii (1927), pp. 112–114 (2 figs.), C. SOMMER writes of the widespread influence of the sculptured group of the Madonna and St. Ann which was acquired by the Kaiser Friedrich Museum in 1911. Its provenance is Alsace, and it has been recognized as the work of Gerhaert von Leyden. There are a number of extant groups that show its influence clearly; the latest of them decorates a sixteenth-century triptych in the Victoria and Albert Museum.

Thirteenth-Century Sculpture of Treves.—In *Berliner Museen* xlix (1928), pp. 54–57 (7 figs.), H. W. v. OPPEN supplements the four important statues of Prophets from the Liebfrauenkirche at Treves that have come into the collection of the Kaiser Friedrich Museum with some of the statues that remain at Treves, to show the relationship of the sculpture of Treves with that of Reims. Parallels for nearly all details of the Treves sculpture may be found among the sculptures of Reims; stylistic features are borrowed regardless of iconography.

SPAIN

SALAMANCA.—The Torre del Gallo.—In *Arquitectura*, 106 (1928), pp. 35–41 (5 figs.), J. L. M. JIMÉNEZ tells of the completion of the work of restoring the Torre del Gallo, over the crossing of the old cathedral of Salamanca. It is this beautiful tower, Romanesque in construction and in all its decorative details, that gives the old cathedral its special significance, and the restoration has been considerably discussed both favorably and unfavorably. The procedure followed in the restoration is here explained and photographs showing the tower before and after the work on it are reproduced, so that the reader can form some judgment for himself.

GREAT BRITAIN

LIVERPOOL.—In *Ann. Arch. Anth.* xv, 1–2 (May, 1928), pp. 47–55 (10 pls.), J. D. DROOP and F. C. LARKIN report on excavations at West Derby Castle, Liverpool. The finds consist of mediaeval pottery, which is gray, buff, or reddish in color, generally glazed in a greenish color; fourteenth-century ware, the leather sole of a shoe, pieces of iron and copper, and bones of animals. Additional excavations are contemplated.

Norman-Type Castle.—Excavations at West Derby revealed faint traces of a small, early Norman type castle which was levelled in 1817. Pottery and other fragments of the fourteenth and the fifteenth century were found. (*Ant. J.* viii, 2 (Apr. 1928), p. 240)

LONDON.—Viking Sheath.—A leather scabbard about 15½ inches long, showing ornamentation and probably dating around the year 1000, or earlier, has been found in the mud 16 feet underground. (*Ant. J.* vii, 4 (Oct. 1927), p. 526)

LUTON, BEDS.—Sixth-Century Saxon Cemetery.—Several graves recently

discovered at Luton give evidence of a Saxon settlement in that place early in the sixth century, according to WILLIAM AUSTIN (*Ant. J.* viii, 2 (Apr. 1928), pp. 177-192 (13 pls.; 3 figs.)). T. W. BAGSHAWE gives a report on the objects found in the graves, which include iron instruments, such as umbos, swords, spears, knives, etc.; bronzes, such as brooches; gold ring; necklaces with Roman coins dating at the end of the third and the beginning of the fourth century; cinerary urns and other vessels. F. G. PARSONS gives a detailed account of the graves and their contents.

Mediaeval Vestment.—In *B. Metr. Mus.* xxii, 12 (Dec. 1927), pp. 300-310 (7 figs.), FRANCES MORRIS tells of the Museum's purchase of a beautifully embroidered chasuble of *opus Anglicanum* from England. The piece has an interesting history dating from the first decade of the fourteenth century. That it is probable that this was part of a set of vestments worked for Edward III is suggested by the resemblance of certain of its features to some of those in Walter de Milemete's illuminated manuscript "*Liber de officiis Regum*" (1326). The vestment was recut at some time in its history which resulted in a bad mutilation of some of the figures. On the front are represented some of the Saints and on the back three "histories," *i.e.*, Christ and the Virgin Enthroned, The Adoration of the Magi, and The Annunciation. The chasuble is a masterpiece of royal needlework and is the first example of this type of vestment to come to America.

NORFOLK.—**Scandinavian Strike-a-Light.**—Another quartzite strike-a-light 4.4 inches long has been found in Norfolk. It probably dates in the fifth century A.D. This type of instrument has been discussed by K. RYGH in *Opuscula Oscari Montelio dicata*, pp. 329-332. (*Ant. J.* viii, 2 (Apr. 1928), p. 236)

SOMERSET.—**Cross-Head.**—In *Ant. J.* viii, 2 (Apr. 1928), pp. 211-216 (2 pls.; 3 figs.), W. D. CARÖE tells of the discovery in Berrow Church, Somerset, of a pierced cross-head in Ham Hill stone and a cross-base of white lias stone from near Bleadon, which was found resting on the bowl of a thirteenth-century font of quatrefoil shape. The date of the cross-head is set by the fourteenth-century armor on the warrior, one of the figures on it. This head is a fine example of its kind.

SOUTH HEREFORDSHIRE.—**Mediaeval Church.**—Excavations show remains of a twelfth-century round church under the now existing fourteenth-century church at Garway. Other twelfth-century fragments were found: pottery, candlestick, moulding. (*Ant. J.* viii, 2 (Apr. 1928), pp. 238-240 (4 figs.))

YORKSHIRE.—**Trefoil Brooch.**—A Viking relic in the form of a bronze brooch has been discovered in the North Riding. For this type of brooch the Northerners copied a Carolingian model showing the acanthus leaf which was then converted into forms of animals and later into meaningless lines and markings. (*Ant. J.* vii, 4 (Oct. 1927), pp. 526-528 (1 fig.))

RENAISSANCE

GENERAL AND MISCELLANEOUS

Recently Acquired Armor.—In *B. Metr. Mus.* xxiii, 1 (Jan. 1928), pp. 16-24 (8 figs.), BASHFORD DEAN mentions the recent accessions to the Armor Department of the Museum. One set is a complete Pisan suit, richly decorated and in perfect condition, dating from 1575. There were added also to the collection two brigandines of rare type. Among other acquisitions may be mentioned a half-suit by Anton Pfeffenhauser (1590); a three-quarter suit (1610-1620), engraved and gilded; a pair of sleeves in triumphator style (about 1520); and numerous pieces of chain mail which add further prestige to a collection already supreme in its field.

Woodcuts.—The Metropolitan Museum's woodcut books printed before 1550 have been listed in *B. Metr. Mus.* xxii, 12 (Dec. 1927), pp. 295–298 (2 figs.).

ITALY

AREZZO.—**Giovanni d'Agnolo di Balduccio.**—In *Boll. d'Arte* vii (1928), pp. 446–464 (12 figs.), A. DEL VITA gives the results of his new studies of Aretine painting of the fifteenth century, about which there has been so much confusion and ignorance among art historians ever since the time of Vasari. That Arezzo was never prominent as an art center must still be recognized; but at least it now seems possible to understand the school better. A large group of paintings, starting from three in the ex-convent of S. M. Novella at Arezzo, and including others in S. Domenico, S. Francesco, and the picture gallery at Arezzo, are here recognized as the work of one hand. They seem most closely related to the works of Parri di Spinello, but are not good enough for him and would seem to be the work of a student of his. A search through documents reveals a certain Giovanni d'Agnolo di Balduccio as an important citizen of Arezzo and an artist active in that city throughout the first half of the fifteenth century. But all of the pictures assigned to him by documents have disappeared except a Madonna enthroned between two saints in the Palazzo Comunale at Arezzo. Though badly preserved, the style is still sufficiently clear in this to link it with the group mentioned above. Thus one more definite artistic personality is identified in the Aretine school.

CREMONA.—**Statues from the Façade of the Cathedral.**—In *Archivio Storico Lombardo* liv (1927), pp. 114–132, C. BONETTI publishes documents regarding the decoration of the façade of Cremona Cathedral at the end of the fifteenth century. Documents from 1491 to 1494 pertain to a certain Master Alberto da Carrara, architect and sculptor. He did not finish the façade, but he did complete two statues, those of Francesco Sforza and his wife, Bianca Maria, putting them in place on the façade in 1494. In the first years of the sixteenth century, after Cremona had fallen under the dominion of Venice, these two statues were removed from the façade and we have no record of what was done with them. It now seems probable that they are to be identified with the two statues of this duke and duchess preserved in the Museo Civico of Vicenza. These statues are almost completely intact; both are of Carrara marble; the one of Sforza is 1.84 m. high, that of Bianca Maria measures 1.78 m.

"Danaë" by Titian.—To the Art Institute of Chicago has been lent a newly found "Danaë" by Titian—one of the artist's most remarkable paintings. (*B.A.I. Chicago* xxii, 5 (May, 1928), pp. 62–63 (1 fig.))

FAENZA.—**A Historical Cup.**—In *Faenza* xv (1927), pp. 125–141 (9 figs.), G. BALLARDINI publishes a cup recently acquired by the Ceramic Museum at Faenza which has unusually interesting historical associations. In its decoration are combined the monogram of Galeotto Manfredi, Signore of Faenza from 1477 till his death, in 1488, and the emblem (peacock feathers) of his loved mistress, Cassandra, the beautiful daughter of Tommaso de' Pavoni. The cup is stamped with the factory mark of Faenza and was probably, though not necessarily, made between 1477 and 1481, the date of Manfredi's betrothal to Francesca Bentivoglio.

A "Casa Pirota" Plate.—In *Faenza* xv (1927), pp. 18–20 (2 figs.), G. BALLARDINI publishes a plate belonging to Dr. Ermindo Vandelli which is recognized as the work of the "Casa Pirota," that flourished in Faenza from 1525 to 1535. The plate was evidently made for some amorous gift. In the center is a female figure with a lance, followed by a cupid with a flaming heart. The border is decorated with foliage and dolphins interspersed with four winged and bearded heads, each

of which bears one of the letters S. P. Q. R. An almost identical plate formerly belonged to *M. Antig.* in Paris.

Famous Woodcuts.—In *B. Metr. Mus.* xxii, 11 (Nov. 1927), pp. 269–272 (2 figs.), W. M. IVINS, JR., notes some recent accessions to the Print Room of the Museum. Among the most noteworthy are: Titian's Pharaoh in the Red Sea, a group by Lucas Cranach the Elder, including The Crucifixion and The Agony in the Garden, and Altdorfer's Beheading of Saint John the Baptist, a number of Baldings, a portrait attributed to Wechtlin, a number of rare and charming Cornelissens, and many of the set of Venetian blocks of the Labor of Hercules. Two coppers also were acquired: Schongauer's Griffin and Lucas of Leyden's masterpiece Ecce Homo.

FLORENCE.—Architectural Sculpture in San Lorenzo.—In *Boll. d'Arte* vii (1927), pp. 232–234 (2 figs.), L. OZZOLA calls attention again to some documents which he published in *La Rassegna Nazionale*, in 1903. These contain expense accounts of work in the basilica of San Lorenzo at Florence in the fifteenth century. Two sculptors, Maso di Matteo and Antonio di Mateo, are credited with the carving of the friezes (for which they received a payment in 1449), representing the lamb in a garland between seraphim, that run above the capitals of the middle nave. The style of this work and other documents also indicate that the two artists referred to are Antonio Rossellino and his elder brother, Tommaso. The capitals in the basilica, that are among the finest examples of ornamental sculpture of the quattrocento, are shown by the documents to be the work of Giovanni di Bertino, Nanni di Miniato, Ciechino di Gaggio, Chimenti di Nanozzo, and Pagno di Lapo. Only the last of these, who made a Madonna and Child in the cathedral museum at Florence, is already known. But the other names are worth attention, because some of the anonymous sculptures extant are doubtless their work, and it may be possible in time to attribute them properly.

Scene in Baptistery.—The Art Institute of Chicago has recently been presented with a group of plaster sculpture representing several Italian sculptors examining the bronze doors of Andrea Pisano in the south wall of the Baptistery at Florence. The scene takes place in 1400 A.D. (*B.A.I. Chicago* xxii, 2 (Feb. 1928), p. 21 (1 fig.))

"Madonna with Saints."—The unfinished painting, "Madonna with Saints," by Paolo Veronese, recently lent to the Art Institute of Chicago, brings to that institute a good example of the artist's ability and an opportunity to study his technical methods. (*B.A.I. Chicago* xxii, 3 (March, 1928), pp. 30–31 (2 figs.))

MILAN.—A Carracci Portrait.—The Association of the "Amici di Brera" has recently presented to the Brera a splendid portrait of a man with a dog by Annibale Carracci. It is published in *Boll. d'Arte* vii (1928), p. 428 (fig.).

PAVIA.—Fifteenth-Century Engravings.—In *Boll. d'Arte* vii (1928), pp. 416–427 (10 figs.), A. CALABI publishes some hitherto unfamiliar Italian engravings of the fifteenth century in the Malaspina Collection. Several are by Nicoletto da Modena and the school of Campagnola. A number of examples in the collection are very rare and some are absolutely unique.

ROME.—Dutch Exhibit.—In *Zeit. Bild. K.* lxii (1928), pp. 2–4 (*Beilage*) (fig.), F. BAUMGART writes of the exhibit of Dutch painting in Rome for which plans had long been made. It is held in the Borghese Gallery and is composed almost wholly of examples from collections in Italy, only the bad gaps being filled by loans from foreign countries. Of the 136 pictures in the exhibit, 9 are from the fifteenth and sixteenth centuries; the rest are from the seventeenth century. It is particularly fitting to have the exhibit in Rome; for Rome and Holland were the two centers of baroque art, and here is afforded ample opportunity for comparison of the two.

S. MINIATO AL TEDESCO.—Unnoticed Works by the Rossellino Brothers.—*In Münch. Jb.* v (1928), pp. 85–100 (11 figs.), M. WEINBERGER and U. MIDDEL-DORF publish some works hitherto unrecognized as by the Rossellino brothers, which add substantially to our knowledge of the activity of the two sculptors. Most important is the tomb of Giovanni Chellini in the Church of S. Jacopo at S. Miniato al Tedesco. Formerly ascribed to Pagno di Lapo and then to Michelozzo, the work shows clearly the style of Bernardo Rossellino, who must have executed the recumbent portrait with his own hand. The architectural part of the tomb was left unfinished at Bernardo's death, in 1464; hence, we have here an important work from his late years, when he did very little sculpture that has come down to us. In a console decorated with an eagle, that is preserved on a wall of the Badia in Florence, is recognized a part of the tabernacle which records show to have been made by Bernardo Rossellino in 1436 for the sacristy of that church. Finally, three sheets of drawings in the Uffizi with putti and Madonna studies are recognized as from the hand of Antonio Rossellino. They have special interest because so few drawings by fifteenth-century sculptors have come down to us.

A Sketch by Tiepolo.—The Museum of Fine Arts, Boston, has acquired a sketch by Tiepolo. It is the artist's rapid oil study in preparation for an elaborate ceiling. The scene is mythological. Juno, attended by Venus and Minerva, Cupid and cherubim is receiving a hero. The eagle of Jupiter and Mercury fly above. Below, at the right is a confused group of four persons one of whom can be recognized as Father Time enmeshed in what seems to be the wreckage of a chariot. The forge of Vulcan, and a wolfish dog and a cannon balance each other in the lower corners. (*B. Mus. F. A.* xxvi, 154 (Apr. 1928), pp. 32–33)

Three Fifteenth-Century Paintings.—The Art Institute of Chicago has acquired through a loan three pictures of the Quattrocento: one, a Madonna by the Sienese Neroccio di Landi, and the other two, by the Trevigian artist Butinone, are small Biblical panels, one, the Flight into Egypt, the other, the Descent from the Cross. (*B.A.I. Chicago* xxi, 7 (Oct. 1927), pp. 86–88 (4 figs.))

Two Inlaid Chairs.—Among the recent acquisitions by the Metropolitan Museum are two beautiful Certosina chairs of the sixteenth century from Lombardy, Italy. One is of the earlier type, *i.e.*, made entirely of wood, while the other has a seat and back of seventeenth-century embroidered velvet. Originally it had velvet or leather straps. (JAMES RORIMER, *B. Metr. Mus.* xxiii, 2 (Feb. 1928), pp. 52–53 (2 figs.))

FRANCE

A Boucher Tapestry.—In *B. Metr. Mus.* xxiii, 1 (Jan. 1928), pp. 15–16, ELEANOR B. SAXE announces that the Museum has acquired through a loan a Beauvais tapestry, the third piece in its galleries of the famous set of the Loves of the Gods designed by François Boucher at Beauvais. The subject of this piece is the Rape of Orithyia by Boreas. The date of the piece is probably between 1756 and 1761.

Lithographs by Henri de Toulouse-Lautrec.—The Art Institute of Chicago has received about one hundred examples of the lithographic prints of Lautrec. (*B.A.I. Chicago* xxii, 1 (Jan. 1928), pp. 2–3 (2 figs.))

Painting by Gauguin.—The Art Institute of Chicago has recently received a painting by Paul Gauguin of a Tahiti woman and two children. The picture is dated 1901. (*B.A.I. Chicago* xxi, 6 (Sept. 1927), p. 76 (1 fig.))

Paul Cézanne.—The Art Institute of Chicago has recently received a head of Paul Cézanne which is an important piece of work in pastel by Renoir. (*B.A.I. Chicago* xxii, 1 (Jan. 1928), p. 6 (1 fig.))

State Partisan of Maurice of Nassau.—The Metropolitan Museum now exhibits

a partisan the blade of which is of the usual form and elegantly enriched with an etched, parcel-gilt design. On one face of the base is etched the portrait of Maurice of Nassau, Prince of Orange (1567-1625). On the reverse side is etched the Prince's heraldic arms. The haft, which is ancient, is apparently ash and is splendidly carved. This partisan is valuable for its extreme rarity. (STEPHEN V. GRANCAY, *B. Metr. Mus.* xxiii, 2 (Feb. 1928), pp. 50-52 (2 figs.))

Two Double-doors by Jean François Cuvilliés.—The Metropolitan Museum has recently acquired two double-doors which it assigns to Jean François Cuvilliés because of their similarity to other specimens of that decorator's work. The doors have gilded carvings on a white ground. They date between 1730 and 1740. The Museum also acquired a set of *entre-portes* decorated in comparatively low relief in white and gold by Cuvilliés. (PRESTON REMINGTON, *B. Metr. Mus.* xxii, 12 (Dec. 1927), pp. 292-294 (2 figs.))

Two Drawings by Daumier.—In *B. Metr. Mus.* xxii, 12 (Dec. 1927), pp. 291-292 (1 fig.), BRYSON BURROUGHS announces the Museum's acquisition of two drawings by Honoré Daumier, one of Don Quixote and Sancho, the other Un Paillasse—A Clown. The latter is described as "miraculous."

GERMANY AND HOLLAND

AUGSBURG.—Breu and Filippino Lippi.—In *Zeit. Bild. K.* lxii (1928), pp. 29-37 (6 figs.), F. ANTAL throws new light on the relationship between Germany and Italy in the period of the Renaissance. It has been customary to think of the influence upon Germany as coming largely from Venice. But in the works of one German artist, Jörg Breu, strong influences of Filippino Lippi, Michelangelo, Botticelli, and other artists of Florence and Rome are seen. The influences are of such nature as to presuppose Breu's having been in Rome especially. His principal productions, the great organ wings (painted in 1519) in the Fugger Chapel in St. Anna at Augsburg, are practically copies of two Italian compositions. One, the Resurrection of Christ, is derived from Botticelli's engraving of the Giving of the Girdle. The other, the Assumption of the Virgin, is derived from Filippino's fresco of the same subject in the Caraffa Chapel in S. Maria sopra Minerva, Rome. It is little wonder that Breu found inspiration in this chapel decorated by Filippino; it furnished inspiration to many an artist in the years between its painting (1490) and Raphael's decorations in the Vatican stanze; and even then Raphael drew many details from the Caraffa frescoes.

BERLIN.—Drawings by Rubens.—In *Berliner Museen* xlix (1928), pp. 57-64 (7 figs.), J. ROSENBERG publishes a number of pen drawings in the Berlin Print Cabinet that can be attributed to Rubens. Some of these have formerly gone under the name of van Dyck. Others have been recognized as by Rubens but were not included in the recent publication of his drawings by Glück and Haberditzl.

Dutch Medals and Models.—In *Berliner Museen* xlviii (1928), pp. 114-119 (8 figs.), K. REGLING publishes some recently acquired medals and models in the Kaiser Friedrich Museum. They include examples by Hagenauer (dated 1528), Weiditz (1532), Tobias Wolff (1572-1576), and two artists that sign with their monograms, I M (1556) and I F L (c. 1580-1600).

A Fifteenth-Century Italian Bronze Relief.—In *Berliner Museen* xlviii (1927), p. 134 (fig.), BODE attributes to Nicolò Fiorentino a bronze portrait plaque of a man in profile recently acquired by the Kaiser Friedrich Museum. The identity of the model cannot be ascertained.

German and Dutch Glass.—C. LOUISE AVERY, (*B. Metr. Mus.* xxiii, 1 (Jan. 1928), pp. 3-15 (13 figs.)) announces that the Metropolitan Museum has recently

purchased about four hundred rare and fragile pieces of glass from the Mühsam Collection in Berlin, which illustrate excellently the history of glass-making in Germany and the Netherlands. The new accessions represent one half of the total collection sold; the other half was acquired by the Art Institute of Chicago. (*B.A.I. Chicago* xxii, 4 (Apr. 1928), pp. 46-55 (12 figs.))

HAMBURG.—*Italian Drawings.*—In *Zeit. Bild. K.* lxii (1928), pp. 43-48 (8 figs.), A. NEUMEYER publishes some little-known drawings by Italian masters in the print cabinet at Hamburg. Among these are examples by Tintoretto, Polidoro da Caravaggio (?). Andrea Meldolla, Perino del Vaga, and a Sienese master of about 1550, possibly Sodoma.

LEIPSIK.—*A Collection of Bolognese Ceramics.*—In *Faenza* xv (1927), pp. 12-17 (8 figs.), M. DI LONGARA shows that there was an important factory of graffito ceramics in Bologna as early as about 1475. Proof is furnished by a piece in the Donini collection which exhibits the style of Cossa, who worked in Bologna in 1472 and 1477, or of one of his contemporaries. The Donini collection, now in Leipsic, is of extreme importance for Italian ceramics. It consists of nearly 2000 pieces, of which about 500 are graffito work, in large part found at Bologna and dating from different epochs, down to the eighteenth century.

LEMBERG.—*Dürer Drawings.*—In *Zeit. Bild. K.* lxii (1928), pp. 20-25 (8 figs.), H. TIETZE and E. TIETZE-CONRAT sift the collection of drawings at Lemberg, that have been attributed in bulk to Dürer, assigning some of them to other masters. Notably, there is a tondo of Europa and the Bull that is recognized as the work of Hans Baldung; Hans Sebald Beham is the author of a nude study of a seated man, and possibly also of a horse; and Hans von Kulmbach is credited with a detail of an Adoration.

NUREMBERG.—*Dürer Exhibit.*—In *Zeit. Bild. K.* lxii (1928), pp. 49-54 (6 figs.), E. ZIMMERMANN gives an account of the exhibit held in Nuremberg this year in celebration of the fourth centennial of Dürer's death. The exhibits held in most cities on this occasion were made up almost wholly of engravings, but the exhibit at Nuremberg was of unusual significance, bringing together as it did many of the master's important paintings, as well as a representative collection of the paintings of his master, Wolgemut, and other predecessors of Dürer and also a number of paintings by his followers.

Burgkmair and Michelangelo.—In *Münch. Jb.* v (1928), pp. 64-69 (5 figs.), A. NEUMEYER finds the earliest trace of the influence of Michelangelo's Bruges Madonna upon art beyond the Alps in the Madonna in the Germanic Museum at Nuremberg which Hans Burgkmair painted in 1509. The motive of the Child standing on the ground amidst the Madonna's drapery and reaching up to her hand is the most striking element of similarity with the Bruges prototype, though the German master has followed the Italian fairly closely in the pose, features, and costume of the Madonna also. Among Italians Signorelli seems to have been the first to use this pose of the Child, and he got it, we may believe, from classical art: it occurs on the sarcophagus of Phaedra at Pisa, from which Niccolo Pisano had long before borrowed certain motives.

A Painting by Brouwer.—In *Berliner Museen* xlix (1928), p. 76 (fig.), is noted, among other recent acquisitions of the Kaiser Friedrich Museum, an interesting painting of the Temptation of St. Anthony by Adriaen Brouwer.

A Painting by Hendrick Ter-Bruggen.—In *Berliner Museen* xlviii (1927), pp. 110-112 (3 figs.), A. V. SCHNEIDER publishes one of the most interesting seventeenth-century Dutch paintings that has recently been acquired by the Kaiser Friedrich Museum. It was bought from a private owner in Hamburg, where it was ascribed to "le Nain." But it was at once recognized as the work of the

Utrecht follower of Caravaggio, Ter-Bruggen. The subject of the painting is the Selling of the Birthright; it is an interior, the only known painting by this master with artificial lighting: the light comes from a candle on the table. The picture is the earliest work by Ter-Bruggen that has come down to us; it was probably painted while he was in Italy, where he stayed till 1614.

Pieter van Santvoort.—In *Berliner Museen* xlix (1928), pp. 64-67 (2 figs.), C. MÜLLER publishes a little landscape by Pieter van Santvoort which has recently come into the Kaiser Friedrich Museum. The biography and style of this little master are here studied and a list of his known paintings is given.

THE HAGUE.—A Study for Titian's Pala of the Pesaro.—In *Boll. d'Arte* vii (1928), pp. 529-537 (8 figs.), G. J. HOOGWERFF publishes an oil painting on canvas recently acquired by a private collector, Dorus Hermesen, at The Hague, from a Belgian collector, which is very clearly a final study of Titian's great altarpiece of the Pesaro Family. The study is 75 cm. high and foreshadows the final painting in nearly every detail, but is even superior to it in one respect, viz., that it is done with greater spontaneity and enthusiasm. Aside from this painted study we know of only one sketch for the Pesaro altarpiece, a drawing of the central part in the Albertina. The detail of the Madonna and Child in the Uffizi is probably a copy rather than a study.

SPAIN

Portrait by Velasquez.—To the Art Institute of Chicago has recently been lent a newly found portrait of Isabella of Bourbon painted by Velasquez probably soon after the year 1630. (*B.A.I. Chicago* xxi, 7 (Oct. 1927), pp. 91-92 (1 fig.))

SWEDEN

Collection of Zorns.—There have been added over three hundred items to the collection of etchings by Anders Zorn in the Art Institute of Chicago. (*B.A.I. Chicago* xxii, 2 (Feb. 1928), pp. 18-19 (3 figs.))

GREAT BRITAIN

DULWICH.—Elsheimer's Early Paintings.—Hitherto not more than a single picture from Adam Elsheimer's early, Venetian, period has been taken account of by historians. H. WEIZSÄCKER, in *Zeit. Bild. K.* lxii (1928), pp. 68-72 (2 figs.), tells of recognizing at least thirteen others that belong to this early period in the artist's career. They show the influence of Tintoretto, Titian, and other Venetians in the figures, but most of the landscape backgrounds are in the style of the northern little masters (as we see it in the school of Coninxloo), all details reproduced with the greatest minutiae, resembling drawing rather than painting, and the coloring of cold green and brown tones. There is one exception, the splendid picture of Suzanna and the Elders in Alleyn's College in Dulwich. Here not only the figures show Italian influence in the elegance of the forms and costumes, but the trees and buildings in the background have a breadth and a depth of coloring that are Italian also.

English Trade Cards.—In *B. Metr. Mus.* xxiii, 2 (Feb. 1928), pp. 45-47 (2 figs.), WILLIAM M. IVINS, JR., announces that the Museum has received three scrap-books containing English trade cards of the eighteenth and early nineteenth centuries. Aside from their humorous interest the cards are valuable because they provide material for a gloss upon the life of the period which they cover.

LONDON.—A Study by Michelangelo.—In *Münch. Jb.* v (1928), pp. 70-84 (7 figs.), K. TOLNAI publishes a sheet of drawings in the collection of Sir Robert Witt, in London, on one side of which is a scene of Christ before Pilate by a pupil of

Michelangelo. This pupil evidently used one of his master's sheets, for not only is there a left leg drawn in Michelangelo's characteristic shorthand manner above the scene of Christ before Pilate, but on the reverse are some fragments of sonnets and various sketches by Michelangelo. The peculiarities of the sketches indicate that they were made about 1531-32. The most interesting among them is a study for a slave. From Sebastiano del Piombo's painting of the Scourging of Christ in S. Pietro in Montorio, and especially from Sebastiano's preparatory drawing for this painting, we learn that the Witt drawing renews an idea that Michelangelo had expressed in a drawing of 1516 from which Sebastiano borrowed his conception of Christ bound to the pillar. The Witt sketch apparently represents Michelangelo's plan for the pendant to the Rebellious Slave that he had already completed in marble (now in the Louvre), and it was drawn at the time that the tomb of Julius was taking its third aspect in Michelangelo's oft-baffled plans.

PONTEFRACT.—Mayor's Seal.—The seal of the office of mayoralty of the borough of Pontefract which was lost in the beginning of the eighteenth century has been found and restored to the borough. The silver seal is dated 1638. (*Ant. J.* viii, 2 (Apr. 1928), pp. 240-241 (1 fig.))

UNITED STATES

Two Statutes by Manship.—The Toledo Museum has acquired two of Paul Manship's most lovely bronzes: "Night" and "Dancer and Gazelles." The former is a beautiful female figure flying through space, with drapery trailing behind her. The latter, inspired by Greek art, consists of two gracefully poised animals between which stands a lithe young female figure. (*Museum News* 51 (May, 1928) (The Toledo Museum of Art, Toledo, United States))

FAR EASTERN

PERSIA

Hellenistic and Sassanian Period, 330 B.C.—630 A.D.—In *The Illustrated London News*, Feb. 11, 1928, pp. 204-205 (9 figs.), ERNST HERZFELD gives his third article on Persia, this time covering the years from 330 B.C. to 630 A.D. During the earlier years of this period Greek influence over Persian art declined rapidly and in the Sassanian period Roman art exerted a powerful influence. The influence of the art in the Roman triumphal columns and gates is reflected generously in Sassanian sculpture.

Persian Glass.—The Art Institute of Chicago has increased its collection of glass by nineteen pieces of richly colored seventeenth-century Persian glassware. The pieces are extremely fragile but very simple in contour and almost without decoration. (*B.A.I. Chicago* xxii, 2 (Feb. 1928), pp. 20-21 (1 fig.))

Persian Objects.—The Art Institute of Chicago has recently placed on exhibition some newly acquired objects of art from Persia. The collection includes fifty-seven pieces of pottery and tiles, nine pieces of glass, sixteen pieces of metal work, five stucco fragments, a stone mihrab (stone slab used to indicate the direction of Mecca), pen boxes, textiles, books and book-bindings, manuscript leaves, and seventy-nine pottery fragments from Fostat, Egypt. (*B.A.I. Chicago* xxii, 3 (March, 1928), pp. 34-38 (9 figs.))

Persian Rug.—The Art Institute of Chicago has recently received a Persian rug woven in Herat during the seventeenth century. Though nearly nine by ten feet, the rug is only a small fragment of the original. (*B.A.I. Chicago* xxi, 6 (Sept. 1927), p. 76 (1 fig.))

INDIA

Buddhist Bas-Reliefs from Gummadiduru.—In *The Illustrated London News*, April 7, 1928, p. 571 (5 figs.), Sir JOHN MARSHALL reports on a number of reliefs discovered by Muhammad Hamid at Gummadiduru in the Kistna district of Madras, as well as Buddhist monasteries or *stupas* and pillared halls at Nagar-junikunda in the district of Guntur. The bas-reliefs are particularly valuable because of the way in which they add to the most artistic of the early Indian sculpture hitherto but sparsely represented. Three Prakrit inscriptions written in Brahmi characters belonging to the second and third centuries A.D., a silver casket, lead coins, and a gold necklace were also found.

PATALIPUTRA.—In *The Illustrated London News*, March 24, 1928, p. 477 (4 figs.), Sir JOHN MARSHALL writes about the remains at Pataliputra, near modern Patna, which was the capital of the Maurya kingdom founded at the close of the fourth century B.C. Additional portions of the heavy wooden palisade that surrounded the city have been excavated and also terracotta figurines of unprecedented type have been found.

Prehistoric Civilization of the Indus.—In *The Illustrated London News*, January 7, 1928, pp. 12–15 and 32 (18 figs.), Sir JOHN MARSHALL reports the results of recent archaeological work in the Indus Valley and the Punjab. At Mohenjo-daro more than thirteen acres of remains have been uncovered showing ruins of the three latest cities on the spot. These structures were all of well-burnt brick. The most impressive buildings were placed around elevated ground and were probably used for religious purposes. One building contains a huge tank or bath measuring 39 feet by 23 feet by 8 feet in depth, which was possibly used to keep sacred animals, crocodiles, fish, etc.

A chamber contains a large well from which the bath was supplied with water. Walls have been found nearly 10 feet thick and composed of three sections, burnt brick on the inside and outside with sun-dried brick between. These were made water-tight by laying the brick in gypsum plaster and covering the inner wall with a layer of bitumen. A drain over 6 feet high conducted the water out of the city. There have also been uncovered private dwellings and shops which by the elegance of their appointments serve to strengthen the belief that life here was advanced much beyond the point that had been reached contemporaneously in Babylonia or in Egypt. At Harappa, four hundred and fifty miles from Mohenjo-daro, Mr. Vats has continued his explorations and the antiquities found are even earlier than those of Mohenjo-daro. The following copper remains have been discovered: mace head, double axes, daggers, lance heads, spear heads, celts, choppers, saws, and chisels. Upwards of a hundred and fifty seals and terracotta sealings have also been uncovered. A model of a two-wheeled cart with roof in the form of a gable may be the oldest known example of a wheeled vehicle. Though most of the ruins at Harappa are sadly mutilated, one building is fairly well preserved. It measures 168 feet by 136 feet and consists of narrow halls and corridors and a wide aisle through the centre. The thought is suggested that, as in the case of the Cretan palaces, this structure was used for storing merchandise.

Spindle whorls discovered among the remains of houses give evidence that spinning and weaving were practiced; pieces of finely woven cotton cloth have been found. These discoveries apparently establish the fact that in this valley the cotton plant of the genus *Gossypium* was known. The garments worn by the upper classes were, in the case of males, in two pieces, a skirt fastened round the waist and a shawl, plain or patterned, worn over the left and under the right shoulder. Men belonging to the lower classes seemingly went naked and women

wore merely a narrow loin cloth. Necklaces and finger-rings were worn by both sexes alike; the women also wore earrings, anklets, girdles, and bangles.

The domesticated animals included the humped long-horned bull, the pig, the sheep, the horse, the elephant, and the dog. Among the wild animals shown on seal-stones are the elephant, the rhinoceros, and the tiger.

In *Ibid.*, January 14, 1928, pp. 42-45 and 78 and 80 (17 figs.), is a continuation of the account of these excavations. Brief discussions are given of various topics of this civilization. The specimens of wheat which have been discovered are very similar to that grown in the region today. The food included, in addition to milk and bread, beef, mutton, pork, flesh from turtles, tortoises, as well as fish. The metals used were gold, silver, tin, copper, and lead. Copper was used very extensively in the making of various kinds of instruments and utensils. The supply of this metal within easy reach was considerable. For the harder instruments, like tools for cutting, bronze was used, which contains from 6 to 12 per cent tin. The tin may have come from regions to the west through Sumer.

The pottery is noted for its great variety in shapes and sizes, the mark of a long development. It is mostly plain red, undecorated ware. There have been found considerable quantities of vessels covered with red slip upon which are painted in black, geometric figures and foliate and animal designs. The pottery indicates a connection between the civilization of the Indus valley and Mesopotamia. It has as yet not been determined what material was used to receive writing, though the approximately a thousand seals that have been discovered suggest that they were used to authenticate commercial documents. The art as shown in representations of animals is remarkably skillful and advanced; as displayed in the attempt to portray the human form it is strangely crude, much inferior to the Sumerian work. Inhumation in the form of "fractional" burial and also cremation seem to have been practiced. In religion parallels to, or connections with Egypt and Mesopotamia seem traceable, though certain distinctively Indian elements are recognized.

The discoveries in the valley of the Indus establish the fact that this culture belonged to the Chalcolithic type stretching from the Adriatic to Japan and concentrated in the great river valleys in the south of this belt, the Nile, the Euphrates, the Tigris, the Indus, etc. Whether the cradle of the Egyptian and Sumerian civilization lies in northern India, as has been lately suggested, remains to be determined through further exploration. Another possibility is that no one section was an original home but that there was considerable interaction between the various centres of population and that new elements of civilization were developed one here and another there. The ruins at Mohenjo-daro are placed between 3300 and 2700 B.C.

A three-volume account of the excavations at Mohenjo-daro, begun six years ago by Banerji and continued by Vats, Dikshit, Sir John Marshall, Sahni, and Mackay is promised to appear very shortly.

CHINA

Early Chinese Frescoes.—In *B. Metr. Mus.* xxii, 11 (Nov. 1927), pp. 267-269 (3 figs.), H. G. HENDERSON announces that ten Chinese frescoes have been lent to the Museum, three of which are undoubtedly of the style of the T'ang Dynasty (618-906 A.D.). These three frescoes show life-size figures of standing Bodhisattvas, draped in garments which seem to flutter in the breeze and elaborately crowned and jeweled. Enough of the original color remains to give some idea of the splendid effect which they must have made when new. The colors are rich and brilliant and the thickness and opaqueness of the paint seem to suggest that it was

done in distemper on a dry surface. The other seven frescoes are smaller and represent human rather than celestial figures. Their technique differs from that of the others in that the painting was done on a moist surface. The colors are less strong, less glowing, and less opaque. The provenience of all the frescoes is uncertain, but there is some evidence to show that the smaller ones came from the village of Huang-wang, province of Shanhsi, from temples built during the Sung Dynasty (960-1126 A.D.), and, judging from their style, they might be placed after the downfall of that Dynasty (1280 A.D.).

JAPAN

Eight Japanese Silk Sashes.—The Art Institute of Chicago has recently acquired eight Japanese obi (silk sashes) which may be assigned to the eighteenth or nineteenth century. These obi are about 26 inches wide and four or five yards long, worn over the kimono by Japanese women. There are many decorative motifs in the patterns, most of which have some religious, mythological, or historical meaning. (*B.A.I. Chicago* xxii, 2 (Feb. 1928), pp. 22-24 (4 figs.))

Two Japanese Paintings.—The Art Institute of Chicago has added two paintings of the Ukiyo-e School to its collection of Japanese color prints. One is by Katsukawa Shunshō dating about 1789. The other is a masterpiece by Chōbunsai Eishi which dates at the end of the eighteenth or beginning of the nineteenth century. Each represents a standing woman in native Japanese costume. (*B.A.I. Chicago* xxii, 1 (Jan. 1928), pp. 4-6 (2 figs.))

NEWS ITEMS FROM ROME

The present report continues those published in *A.J.A.* xxx (1926), 362-366, and xxxi (1927), 383-388, which dealt in large part with developments still in progress. Some outstanding items of news, such as the investigation of the Mausoleum of Augustus and a section of the Capitoline Hill (*Classical Weekly*, xxi, 99f., Jan. 23, 1928), the discoveries in the necropolis of Spina and at the site of Velia, and the vigorous prosecution of the Herculaneum project, have already been made known by published reports both technical and popular: hence preference will be accorded here to information that is as yet unpublished or not widely diffused.

In the city of Rome itself, the archaeological activity of the government has been so intensive and so varied that a mere list of what has been accomplished or is under way is impressive. This includes the liberation of the Capitoline Hill from the unsightly structures that in the course of the centuries had clustered about its slopes; the clearing of the Circus Maximus, which was begun on the Birthday of the City, April 21, of the present year, and will take perhaps ten years to carry to completion; the enlargement and rearrangement of the Antiquarium on the Caelian, which now that its sculptures have been transferred to the Capitol (the new Museo Mussolini, behind the Conservatori Museum) is to be devoted exclusively to the display of structural and decorative materials and details, and to antiquities relating to burial rites, together with the marble plan of the city and the inscriptions of the troops detailed to the fire and police services; the completion of the systematization of the tomb of the Scipios and the neighboring cemetery; and the investigation of the southern part of the Palatine Hill.

The past year has also witnessed the inauguration of a new wing of the Terme Museum, with the addition of seventeen exhibition halls and the general rearrangement of all departments except the Ludovisi Collection; a welcome addition consists in the numerous remarkable statues and heads that have been found partly in systematic excavations, especially at Hadrian's Villa, and partly as the

result of intensified agricultural operations, in particular at the Villa of the Quintili on the Via Appia; the use of tractor plows, which in general is to be deplored from the standpoint of the archaeologist, still has led to the uncovering of some material of value. Moreover, the fragments of the *Ara Pacis Augustae* which are preserved in this museum have been assembled and grouped in a special room together with other significant monuments of the Augustan Age; and there has been installed a representative collection of tomb paintings including an entire columbarium. At the Villa Giulia Museum also a new wing has been opened, on the north side of the building, and in four of the additional halls thus provided there has been installed the rich Castellani Collection.

Among the details of the far-reaching programme for the development of Rome are included the complete exploration of Nero's Golden House, the restoration of the *Ara Pacis*, either *in situ* or in the Terme Museum, the entire liberation of the Baths of Diocletian, and the isolation of the Curia. The eventual construction of an avenue to connect the lower end of the Via Cavour with the valley of the Colosseum—an urgent need of the constantly expanding modern city—should not interfere with the view of any ancient monument at present visible, but should bring with it the dignified systematization of an important zone.

The developments on the Palatine demand especial attention at the present time. Dr. Alfonso Bartoli, the successor to Giacomo Boni, is carefully investigating the remains of Domitian's palace which were incorporated in later structures, and is preserving as much as possible of the ancient work—much more than was hitherto supposed to be still in existence. He is also establishing on the ground floor of the abandoned convent of the *Visitazione* an Antiquarium of the Palatine which is to serve a function similar to that of Commendatore Boni's Antiquarium of the Forum: here are to be exhibited the numerous architectural fragments and other details which belong on the hill, but which cannot properly be allowed to remain scattered out of doors; in particular, it will now prove possible to appreciate more readily the qualities of Domitianic design and execution. The restoration of a large marble bowl, some six feet in diameter, covered with delicate leafy ornament in low relief, a masterpiece of Augustan decorative sculpture, was approaching completion at the time that Dr. Bartoli kindly explained his activities to the members of the American Academy in Rome.

The demolition of certain modern structures to the northeast of the Forum of Trajan has led to a revision of accepted ideas as to the plan of that Forum itself and of the street system of the region; it has disclosed an elaborate and grandiose series of edifices which must have constituted a striking element even in the Rome of the second century of the Empire: a great hemicycle with two stories of arcades, and behind it, at a higher level of the Quirinal Hill, another similar system of rooms, also in two stories, following the same curve; and behind them the important ancient road, known in the Middle Ages as the *Via Biberatica*, which served as a means of communication between two important quarters of the city; this street itself was curved, and flanked on each side by small rooms. Following this road almost due north from the turn which it makes at the northwest end of the great apse, we find to its right still another system of rooms, these being rectangular in plan and grouped on both sides of a large vaulted hall. The greater part of all these structures, as well as the road itself, is indicated on Lanciani's *Forma Urbis Romae*, as they were drawn by architects of the Renaissance; but their recovery in so complete a state comes as a surprise; and, as Commendatore Giglioli pointed out on the morning when he was so kind as to show us the whole region in detail, at least another year's work of excavation, study and systematization still remains to be done. The evidence of stamped tiles found at various points in the structure of

the walls dates the work in the early years of the principate of Hadrian. When the liberation of all this area shall have been accomplished, the result will be in part a valuable addition to the impressive series of remains of Roman magnificence that will extend in an unbroken sweep from the Palatine to the Quirinal, and in part the revealing of one of the most characteristic structures that have survived from classical antiquity, an admirable example of architectural planning as applied to commercial requirements: for the main purpose of these series of superimposed arcades seems to have been to house the merchants whose interests centred in this region, and for whom it must have been necessary to provide new quarters in connection with the construction of Trajan's Forum itself. The architect may well have been the famous Apollodorus of Damascus himself.

It is quite possible that this group of halls, rather than the Forum as a whole, is the very building which was recalled to the mind of the topographer Pausanias (v. 12. 6) when the sight of a statue of Trajan in the temple of Zeus at Olympia led him to enumerate the most noteworthy architectural achievements of that prince, and to include among them "the market of the Romans, worth seeing both for the rest of its adornment and especially with respect to its roof, which is made of bronze," and again (x. 5. 11) when, speaking of the tradition at Delphi as to the third period of the temple of Apollo, he says, "That it was made of bronze is nothing strange, if indeed . . . the market at Rome, which for its size and the rest of its adornment is admirable, has its roof of bronze."

For those of us whose recollection of these things spans the past quarter of a century, Ostia furnishes sensations of peculiar interest. Year by year, as the extensive programme of excavation has developed, there has come to light one element after another of the commercial port on which imperial Rome depended for its subsistence; and the Ostia of Republican times as well has become familiar to the world of scholars. The care which Dr. Calza and his staff have devoted to the maintenance and adornment of the ruins is now bearing fruit; for the sporadic finds of sculpture and inscriptions have been effectively disposed so as both to please and instruct, while the rich vegetation of this region has been encouraged to soften the contours of gaunt commercial edifices, and to lend to prosaic brick and mortar a picturesque charm which otherwise would be wanting. At the same time, the excavation proper proceeds with undiminished intensity, especially near the centre of the city and on the south side of the *Decumanus*. The clearing of the great baths is not entirely completed, and therefore a detailed description would be premature. They consist however of a huge edifice with a magnificent plan following that of the best known establishments of the capital; they were built in the second century A.D., but continued in use for a long time, and were partially reconstructed in the Constantinian period. Up to now there have been uncovered the halls surrounding the central frigidarium; these were adorned with twenty-four *cipollino* columns and white mosaic pavements. Perhaps even more remarkable has been the chance discovery, resulting from the construction of a new bridge across the outlet of the marsh on the side of Ostia toward Rome, of a stretch of the substructure of the old *Via Ostiensis*, which is attributed to the second century B.C.: this consists of massive square piles of oak wood.

The much-discussed project of uncovering the two Roman ships at the bottom of the Lake of Nemi has at last entered upon the practical phase. The method which has been officially approved is that of a powerful electric pump discharging the water through the ancient emissary which ever since its construction has served to maintain the lake at a constant level. The preliminary operations, in which the level of the lake has been somewhat lowered and the whole extent of the emissary left dry, have permitted the detailed study of the emissary itself, a re-

markable monument of early hydraulic engineering, and the ascertaining of the various elements in its design and execution; like the better-known outlet of the Alban Lake, it was constructed in two stages; a sharply inclined section with its intake at a certain height on the side toward the lake served to reduce the level of the water somewhat, pending the completion of the main, slightly sloping channel at the low level as intended. At the moment of writing, June, 1928, further progress has been suspended in view of the necessity of making sure of the capacity of this venerable outlet to dispose of the volume of water, and to stand the rapid flow contemplated: a certain amount of reinforcing and adjustment of the channel will apparently be required before the full force of the pump can safely be brought into action. How long this will take, and how serious the technical difficulties may eventually prove, cannot be estimated at present; we may, however, hope soon to realize the dream of centuries and see the phantom houseboats of imperial Rome.

We now proceed to Etruscan territory. In last year's report, a special feature consisted in the account (*A.J.A.* xxxi (1927), 386 f.) of the systematic uncovering of the great necropolis areas to the north and west of Cervetri, the ancient Caere. The exceptional importance of this undertaking renders it advisable to reproduce in full the account which has been kindly furnished by the excavator, dealing with the past year's progress and resuming the state of knowledge up to the present time.

After a period of almost complete cessation, from the end of June to the beginning of September, 1927, these excavations, which are being conducted at the expense of the Ministry of Public Instruction and under the direction of the Ingegnere Raniero Mengarelli, were resumed, and they were continued with vigor, and without interruption, until the time of writing, the intention being to carry on through the month of June, when the coming of the intense Summer heat, which renders it difficult to move masses of earth, will again compel suspension of operations.

The work was continued in conformity with the general plan which has been followed for several years past: methodical and scrupulous exploration of the zone that extends along both sides of the very ancient street traversing the "*Banditaccia*" necropolis from southwest to northeast, reaching and crossing the western boundary of the ancient city itself. This is the same street that came to light during the first years of excavation. This highway, which was cut in the native tufa rock by the Etruscans, may now be followed clear in to the city of Caere, since the immense quantity of earth has been removed that had accumulated, during the course of so many centuries, until it completely filled the hollow, even along the stretches where it reaches the depth of some twelve meters. The wheels of the Etruscan vehicles had excavated on the surface of this thoroughfare two deep furrows or ruts.

Along the rock walls of this street there appear at various heights and in great numbers tombs of diverse forms and ages: chamber tombs, cist graves, those with sarcophagus, with *pozzetto*; these all are to be assigned to an extremely lengthy period extending from the time of the famous Regolini-Galassi Tomb, and even somewhat earlier, down to the Empire. Even some small tumuli having their boundaries marked by stone circles, and containing very archaic chamber tombs, are sometimes set against the walls of the street.

A great number of the chamber tombs flanking the street were found pillaged; perhaps this process had begun at a remote period. However, some have been discovered absolutely intact. The same is true of the cist and sarcophagus graves; and the loculi also, which were less attractive to treasure-hunters, have often appeared in a perfect state of preservation, and unviolated.

Again, in the level areas which extend on both sides of the above-mentioned street there have been found tombs of various types and periods; but no one of them is of late date. Here tumuli appear in great numbers; the earthen mounds which once covered them have long since disappeared owing to atmospheric agencies and agricultural activity. Some tumuli, of modest dimensions, cover chamber tombs, which resemble copies of the Regolini-Galassi Tomb on a minute scale; and like that tomb also they are partly cut out of the tufa rock and in their upper portions are completed by layers of slabs which project successively one over the other, until they finally come together at the top. In these tombs is found funeral furniture composed essentially of Italiot ceramics of *impasto nero*, with black or red slip: there are ollae, amphorae (sometimes with eyes of the so-called Latial type), kantharoi, etc. Sometimes there are found common terra-cotta vases of the "Italo-geometric" class, especially amphorae and plates with painted decoration formed of bands and simple geometric motives and zones of animals, and more often of birds, indicated schematically and rudely. Very rarely are vases found that may be classified among the earliest Proto-Corinthian ware.

On the crest of the rock walls of this street, and especially on the eastern side, there rise some tumuli having a cylindrical base carved in the tufa and sometimes crowned with a cornice, with a corridor opening toward the street, which corridor leads toward a central group of chambers and two side chambers. These tumuli belong to a period which in general may be included between the first half of the sixth and the second half of the fifth centuries B.C. Here are found *buccheri*, Corinthian and Attic vases, and local ware. The tumuli of this class, which were the most conspicuous, were subject in a greater degree than the rest of the tombs to depredations at all periods. Notwithstanding, the material which has been collected there, although in general very fragmentary, is often of especial importance and of great archaeological value.

The general view of the new excavations, as soon as the necessary restorations have been completed, will be truly impressive and picturesque.

During the past months there was likewise continued the exploration of the cemetery of the "*Cava di Pozzolana*," to the north of Caere, immediately outside the trench which the Etruscans excavated at that point for the defence of the city. As in the past, there have come to light here many *fossa* tombs with inhumed remains, and a few *pozzetti* with ash-urns, beside several chamber tombs extending from the Villanovan period down to the Roman domination; tombs which are confused one with another and sometimes are superposed and intersecting. The Villanovan ossuaries, with the characteristic incised geometric decorations, enclosed sometimes in tufa receptacles, are rare, while those that preserve the Villanovan form, but are without incised decoration, are less rare. The scanty equipment and ornaments accompanying the ossuaries consist of few and small vases of *impasto*, which were placed outside the ossuary itself, and a few fibulae, or some lunate knives of bronze distorted by the action of fire, which are found mingled with the burnt bones.

Numerous are the *fosse*, at the bottoms of which there rarely appear any traces of skeletons; the scanty equipment and personal ornaments found in them are in general of inferior quality. Some are to be referred to the same period as the Villanovan ossuaries; and very many to succeeding epochs, although the contents still consist of rude ware, mostly handmade, and the personal equipment appears slightly richer than that accompanying the ossuaries.

The few chamber tombs found among the *fosse* and the *pozzetti* are, as a rule, of the period of the Proto-Corinthian vases and the fine *buccheri*; and very few are of the period of the black-figured Proto-Attic and Attic vases.

In the "*Cava di Pozzolana*" necropolis, no interments were made from the period of the red-figured Attic ware down to Roman times, when bodies were buried in simple trenches, or with the protection of tiles.

In the most recent period of the campaign, there has also been taken up again with energy the work of exploring the huge tumulus of Montetosto, which rises from the plain, some five kilometers distant from Caere, to the right of the road that connected this city with the port of Pyrgi. This difficult and dangerous undertaking, which requires many solidly reinforced tunnels and shafts, has already led to the discovery of one group of burial chambers of a most ancient type, with an important equipment of local and imported ceramic wares, and of objects of especial value; a full description will be given in an official publication as soon as the restoration has been completed of these materials, which unfortunately are badly damaged and broken. The excavation of the tumulus of Montetosto will be resumed in the autumn.

Details as to the culture of Umbria steadily accumulate. From Perugia comes the news of the finding of a chamber tomb in the region of Monteluce, containing three travertine urns with pent-house roofs and some small terra-cotta vases. The urns have been taken to the Perugia Museum; special interest attaches to the fact that while two of them contained cremation remains, the third disclosed the bones of a skeleton that was inhumed; this is not the first instance where the two rites have been found co-existent in the same family.

In Campania, another important necropolis is to be added to the list of those already known: at Caivano, not far distant from ancient Atella, a chance discovery revealed an admirably constructed marble tomb, intact, containing ashes and many artistic products of gold and other metals; soon four similar tombs came to light, and the task of properly excavating the whole cemetery has been assumed by the government organization under Dr. Maiuri. These are burials of the fourth century B.C., and should prove of great historic interest as dating from a period before Campania had succumbed to the influence of Rome. The necropolis appears to be quite extensive, untouched, and easy to explore methodically.

At Herculaneum, the extensive new scheme of excavation, so rich in promise, has definitely passed its preliminary stage and is beginning to yield results, which while not yet remarkable in character still are welcome both as adding to our knowledge of the topography and as demonstrating that notwithstanding the depredations of earlier centuries, which have left their mark throughout this area in the form of numerous tunnels, much still remains to be uncovered in this mysterious town.

The course of the excavations had been somewhat retarded for the space of three months in the early part of 1928 owing to the necessity of removing an entire mound, some fourteen meters high, which had been planted as a garden, and which stood directly over the point where an important ancient structure with all the characteristics of a public edifice was beginning to appear. From this neighborhood about six thousand cubic meters of earth have been removed, by means of a Decauville light railway, to fill in the coast at the spot where a new quarter of Resina is projected for the purpose of housing the inhabitants who eventually will be dispossessed of their present abodes to make way for the excavators.

In the meanwhile, pending the completion of these operations, progress has been made in the region of the House of the Skeleton, where fourteen more rooms have been excavated and been given the necessary repairs. The building includes Hellenistic elements. The area of the garden has been found, and immediately replanted with shrubbery belonging to the species known in antiquity. Behind the garden, access is afforded to the house by means of two flights of stairs, between

which are four small columns consisting of a core of red bricks, with a fluted stucco facing. At present the atrium is being uncovered; it is adorned with painted decoration, and there has been found the central table, of marble with bronze feet, an unusual detail. In addition to the garden and the atrium, there have come to light the triclinium and two bedrooms, the former decorated with paintings of the period of the Empire with very effective floral motives and some admirably preserved series of dolphins, stags, and birds. One of the bedrooms has its walls painted in red with designs of animals, the other is still in course of excavation.

Work is being continued in the vicinity of the House of the Skeleton, where there are valuable mosaic pavements, completely preserved; the excavators are confident that other important objects as well will come to light here. Meanwhile, both in this zone and elsewhere there have been found a number of statuettes of good workmanship: for example, a Paris of pink marble, eighty centimeters high, a Diana, and a Lar of bronze, not to mention terra-cotta vases, bronze utensils, and various objects, bottles, loaves of bread, grapes, beans and various seeds, these latter, as was inevitable, reduced to a state of carbonization.

Pompeii likewise should prove fruitful in new material when the present activity of the official staff has attained its objectives; both here and at Herculaneum the promptness with which both preliminary and final publication is being accomplished deserves grateful recognition. Students of not only the present generation but future centuries as well will be grateful for the steps which are being taken to restore and preserve the remains of both these buried cities; not only the new excavations of the *Strada dell' Abbondanza*, but such well-known houses as the *Casa dei Vettii* and the *Casa del Laberinio*, are now assured a measure of protection from the elements. Meanwhile the progressive replanting of the gardens with the flora of the ancients contributes to form a truthful picture of the surroundings of ancient life.

The most remarkable item of news concerning the extreme south of Italy comes from Canosa, the ancient Canusium, in Apulia, a site which Horace visited on his way to Brundisium, and which has long held distinguished rank in archaeological literature. Here the extensive drainage operations have brought to light, at a point about one kilometer from the city on the road toward Cerignola, various tombs of considerable importance. A group of three of these appear to have suffered from the collapse of their roofs at some remote period, but fortunately to have escaped harm from marauders. In consequence, although almost all their contents are in a fragmentary state, it has proved possible to rescue a portion of them, as, for example, several spear-heads, some small amphorae, one of which is of silver, some clay vases, a double conch-shell of gilded bronze, ten centimeters in size, some statuettes, etc., as well as numerous miscellaneous fragments. The excavations are still in progress, and in one of the three tombs a number of gold objects have been found, lying round about the body of a woman which appears to belong to the Roman period. The list of these includes two earrings consisting of figurines hung on swivels; a solid gold wreath with foliate decoration combined with precious stones; a necklace with fringed pendants; a ring; two buttons; a pair of earrings consisting of clusters of grapes executed in minute beads; a sheet of gold foil; a necklace in the form of serpents' scales. Practically all this jewelry is of gold, and it represents a considerable intrinsic value. In addition, there have been observed some traces of amianthus, a greenish substance resembling asbestos, together with bits of gold fibre; these appear also on the remains of a skeleton, indicating that the body was buried in rich garments woven of gold thread; as the body decomposed the remains of the gold adhered to the bones and to the amianthus upon which the body lay. It is rarely that we learn of the discovery of unpillaged

tombs containing objects of gold and silver; and in view of the unscientific character, and inadequate publication, of much of the excavations of a century ago in the region of Canusium, it is peculiarly fortunate that the present remarkable finds are being followed with care by the authorities; when brought to completion and fully published, they should constitute a welcome addition to knowledge of Roman jewelry, and other matters too.

The Italian colonies continue to supply archaeological news of great interest. Cyrene is proving a veritable treasure-house of architecture, sculpture, and epigraphy; the sculpture furnished material for an inspiring lecture delivered by Dr. Anti early in April in Rome; practically all periods and various schools of both Greek and Roman art are represented, both in originals and in provincial adaptations; an early *kouros* figure of Ionic style deserves a prominent place in histories of art.

Lepcis Magna (the traditional spelling *Leptis* is to be corrected in the light of the inscriptions) formed the subject of a lecture before the American Academy in Rome by its fortunate excavator, Dr. Bartoccini; its interest centres in the period of Septimius Severus, with grandiose baths and other public edifices, the plan of which should prove suggestive to architects of the present day.

Albania, which until recently has remained almost *terra incognita* to archaeologists, is now within the sphere of activity of Italian investigators; Dr. Ugolini's first volume, which appeared last year (Luigi M. Ugolini, *Albania Antica*, Vol. I, Rome-Milan, 1927), is shortly to be followed by Volume II, and these may be hailed as the first-fruits of a field which is full of promise. At Rhodes, the present state of monuments and excavations was made known by means of the archaeological congress held there in the spring of this year; while the establishment of a historical and archaeological institute is an encouraging sign for the future.

An outstanding event, both for achievement and for promise, has been the First International Congress of Etruscology, which was held in Florence at the end of April and the beginning of May. The study of the Etruscans has fully recovered from a long period of neglect, and now not only is exercising a fascination over the wider public but is seriously engaging the interest of many able investigators. The Italian and German scholars were conspicuous by their contributions to the discussions, as was to be expected; that their Scandinavian colleagues were equally prominent served to emphasize what was already familiar to specialists, namely, that the field of Mediterranean prehistory and protohistory is at present being cultivated with great energy and success by the scientists of the Nordic nations.

The year has witnessed important changes in the personnel of the foreign institutions in Rome: at the American Academy Professor H. A. Sanders has been appointed head of the School of Classical Studies; at the British School Mr. Arthur Hamilton Smith succeeds Mr. Bernard Ashmole as director; at the German Institute the late Walther Amelung's place as first secretary has been taken by Dr. Ludwig Curtius. The construction of a permanent home for the Roumanian School has begun; the Swedish Institute has moved to more commodious quarters in the Palazzo Brancaccio; the Pontifical Academy of Archaeology and the other ecclesiastical institutes with kindred interests are established in a dignified residence of their own on the Esquiline near Santa Maria Maggiore.

This report would not be complete without a reference to the increasing ease with which archaeological sites in Italy can now be visited; for in this is to be found a corrective for what appears to some to constitute a menace to the serious prosecution of our studies, namely the tendency to rely on the predigested, simplified, and denatured material that is now so readily available in the publications: there can be no adequate substitute for first-hand acquaintance with the country and its

monuments. The past year has witnessed the inauguration of the direct railway line between Rome and Naples, and the extension of a vast system of automobile omnibus routes and motor roads. A branch railway leaving the main line near Metaponto will soon render accessible the famous prehistoric centre Matera with its rich museum. At the same time, information concerning present travel conditions is being made accessible as the successive volumes appear of the *Guida d'Italia del Touring Club Italiano*; to the archaeologist and historian volume ii, 1927, of the section *Italia Meridionale* will prove indispensable, treating as it does of Naples, Pompeii and the neighborhood; the scientific information incorporated in the present volume appears up-to-date and reliable, and free from indications of haste in compilation.

A. W. V. B.

NEWS ITEMS FROM ATHENS

At the Heraion of Samos, where Dr. Buschor and Dr. Reuther were excavating for the German Institute, the prehistoric settlement discovered in 1926 north of the Temple was followed out further toward the east and north and yielded chiefly objects of the middle Bronze Age. At the northwest corner of the great Temple the prehistoric level drops sharply toward the south and west. The mouth of the river lay then much nearer, as evidenced by a thick flood deposit and several layers of gravel. From the river in Greek times ran an old road toward the east turning soon northward (Northwest Road).¹ Out of this branched another road which turned toward the southeast and was later covered over by the western half of the great Temple. On its east side this latter road was lined with very archaic dedications. The dedicatory offerings were perhaps moved into the two-hundred-foot long hall which begins near the northwest corner of the great Temple and extends toward the northeast. About the fifth century a long north wall was joined to this hall forming the northern boundary of the Sanctuary. Outside it runs a well-built street. In Hellenistic times a colonnade was built against the inside of the north wall. In the area between this colonnade and the Temple there were many periods of building: Greek temples above prehistoric walls, Roman dedicatory offerings above these, and still higher, ancient peristyle houses and later dwellings up to the seventh century A.D. The ruins of the Temple itself and the area north of the north colonnade were undisturbed by later building operations. The Byzantine town must have stopped here, for the region to the east in front of the façade of the Temple appears to have formed the centre of the town with a church, baths, and so-called "pillared hall." This region was reexamined for traces of the ancient altars. There must have been several altars to correspond with the nine rebuildings of the Temple.² Under Temples II and VIII-IX, as well as under the great Roman altar, was found a thick layer of ashes containing numerous offerings of the Geometric and Orientalizing period: pots, bronzes, terracottas, faïence, limestone statuettes, etc. A series of valuable bronze statuettes came also from other places, e.g. a very archaic youth, a late archaic rider, numerous griffin protomes and a bronze statue of Aphrodite. Remains of archaic statues and reliefs of poros and blocks of an archaizing door-frieze from Temple VIII were also found. Among the inscriptions two decrees are important; two new inscribed stones were added to the Cicero Exedra.³ The latest honorary statues appear to be those of Caracalla and some of the Aurelians, so frequent after 212 A.D.

¹ See plan in *Gnomon*, 4 (1928), p. 53.

² *Gnomon*, 2, (1926), p. 122; 4 (1928), pp. 52-54.

³ *Ath. Mitth.*, XLIV (1919), p. 34.

The excavations of the Greek archaeologists in 1927 were for the most part continuations of those of preceding years; thus, the excavation of Eleusis was begun more than forty years ago, but still continues. This year Mr. Kourouniotis carried out important excavations immediately outside the southern and eastern walls of the enclosure of the Sanctuary of Demeter.¹ Toward the east was uncovered a long series of great reservoirs of Roman times which had been built up against the enclosure wall and covered the Periclean part of this wall for a distance of about seventy meters. From these reservoirs the water ran into basins many parts of which are preserved in front of the reservoirs. But a more important piece of work east of the sacred enclosure was the discovery and clearing of the lower part of a great round tower and a considerable section of the adjoining wall of the peribolos built of blue Eleusinian stone blocks beautifully worked. This part of the wall was built in the time of Pericles during his reconstruction of the Eleusinian Sanctuary. South of the Sanctuary, in front of the Mithraeum excavated some years ago, was discovered the lower part of a great rectangular building which consisted of a central court probably surrounded with a colonnade and with a propylon adorned with columns, on its north side. It is possible that this building was a gathering place for worshippers of Mithra, for in late antiquity the cult of Mithra seems to have flourished at Eleusis. The building was erected in Roman imperial times and within it was found a statue of a Roman emperor of the Claudian family, as appears from the similarity of the head to the known portraits of members of that family. The year's excavations have greatly improved the appearance of the ruins at this end of the Sanctuary. Excavations were continued this year also at the Amphiarraion, on the east coast of Attica, by Dr. Leonardos. Various details of the water system were brought to light, and as usual on this site there were found important inscriptions throwing light on the history of the Sanctuary. The plan for the complete excavation of the great cemeteries of the ancient demes of Attica was put into effect this year in order to curb the illicit excavations instigated by the Athenian dealers in antiquities. A beginning was made in the ancient demes of Halimous, Aixone, and Halae along the west coast of Attica. This excavation was under the direction of the Ephor of Attica, Mr. N. Kyparissis. On the same coast there was completed this year by Mr. Kourouniotis the clearing of the notable Temple of Apollo Zoster near Vouliagmene, mentioned by Pausanias. The important ruins of this temple with its archaic inscriptions had been discovered the preceding year. At Thebes, at the expense of the Greek Archaeological Society, Professor Keramopoulos continued his excavations of the Mycenaean palace on the "Cadmeia." One new section of the palace was excavated and many fragments of Mycenaean frescoes were found, together with Mycenaean pottery and ornaments and a beautiful golden doe. At Nea Anchialos in Thessaly, excavations by the Greek Archaeological Society, under the direction of Mr. G. Sotiriou, revealed the adjuncts of the great Byzantine basilica of the ancient city of Thessalian Thebes. There was found the Sacristy of the church within which were many glass and metal sacred vessels, badly damaged. The Baptistery, also excavated, was in form like a small church with its apse toward the west and with a circular font in the middle. The floors of these two buildings consist of small fragments of marble of various colors. The northern and southern pylons of the Basilica itself were cleared as well as the passages to the galleries. Many architectural pieces were found, including capitals and mouldings, thanks to which a reconstruction may now be made on paper. These details show that this is artistically one of the most im-

¹ Thanks to the assistance of the Port Authorities, it was possible to carry out these excavations at a greatly reduced cost.

portant Byzantine churches. At Agrinion in Aitolia a new excavation was begun by the Ephor, Mr. Miliades, to discover the site of the ancient city. This lies outside the modern town, and its full extent was ascertained and points were noted where in future excavations it will be possible to bring to light important buildings. This year a great stoa eighty meters long was discovered. Mr. Miliades also carried out a small excavation of tombs at Arta. Both of these excavations were made possible by gifts of private individuals. In the Peloponnesos at the site of ancient Stymphalos, Professor Orlandos continued his work for the Greek Archaeological Society. Thanks to the aridity of recent years, it was possible to excavate the ancient palaestra and the ruins of an ancient Temple of Athena within the area usually covered by the waters of the Stymphalian Lake. Professor Orlandos and the Ephor, Mr. Karachalios, cleared a very elaborate fountain in the ancient city of Phigaleia. Excavations were resumed in Lesbos by the Ephor, Mr. Evangelides, on the small plateau between Hagia Paraskeve and Kalloni near the ruins of an archaic Aeolic temple previously discovered. A new temple was found with columns of the peculiar Aeolic type having bases with a thick torus and unfluted column-drums. The complete exploration of these temples and study of their architectural members will materially add to the knowledge of the art of the Aeolic cities of Lesbos and the opposite shore of Asia Minor.

An Open Meeting was held at the Italian School on April 25, when Mr. Della Seta gave a report on their excavations at Lemnos during the summer of 1927; a summary of the results of this campaign has already appeared in the News Items.

The Austrian Archaeological Institute carried out an exploration campaign during the late summer and autumn of 1927 at Ephesus. On the hill of Aya-Solouk they cleared the remains of the church of St. John the Theologian, built by Justinian in the sixth century, and beneath it found traces of still earlier churches. In another region they discovered a fifth-century necropolis with several hundred tombs cut into the rock at different levels, and in a catacomb under the church attached to the cemetery, the Tomb of the Seven Sleepers, who were, according to legend, buried alive about 250 A.D. but found still living in 452 when the vault was opened by chance. The church and cemetery were therefore built in their honor by the Emperor Theodosius II. A third discovery belongs to the pre-Christian era and consists of an elaborate bathing establishment and gymnasium and a large colonnade beyond. In the latter were found many pieces of sculpture—a bas-relief of Dionysos, a statue of Vesta Justiniani, statues of philosophers, one of an emperor, and a head of Aspasia.

Very few reports of the 1928 spring campaigns have yet come in, but the German Institute was continuing its work under Mr. Buschor at Samos, finding a very fine series of Roman portraits of the Claudian family. The British School did not carry on any new campaign at Sparta, but Mr. Woodward and his assistants devoted their time to the study of the material from the past campaigns, preparatory to publication. The American excavations included Mr. Shear's third campaign in the Theatre at Corinth and the School's excavation of the Odeum at the same site; Mr. Blegen's third campaign at the Argive Heraeum and the clearing of a small neolithic site at Hagiorgitika in Arcadia near Tripolis; the excavation at Olynthus in Chalcidice by Professor David Robinson of Johns Hopkins.¹ Mr. Robinson spent more than three months with a large force of men investigating this site, which had not been disturbed since the city's destruction by Philip of Macedon in 348 B.C. Evidence of this siege was found in lead sling-stones bearing the name of Philip, which were of larger size than others belonging to the defenders

¹ See *The Illustrated London News*, May 26, 1928.

and inscribed with the first syllable of "Chalcidians." The Acropolis of Olynthus is a table-topped hill half a mile long and rises some 250 feet above the plain. The fourth-century city covered not only this but several lower adjoining hills and spread over the surrounding plain, but its outer confines have not yet been established, as it must have been several miles in circuit, and one campaign could not hope to determine its extent. At the southern end of the Acropolis an extensive neolithic deposit was found which produced, besides pottery, many beautiful stone celts, terracotta figurines and a well preserved potter's kiln with an interesting arrangement of flues. A fine paved road leads up from the plain to the classical city, ending near a large rectangular building or series of buildings (Agora?) with cement-lined cisterns beneath for water and pits for the storage of grain. In a storeroom nearby was found a deposit of votive figurines and vases which should indicate the presence of a sanctuary in this region.

The greatest interest, however, lies in the residential area with its fine straight street running north and south, fifteen feet in width and with a gutter down either side of it. The houses had each one entrance from the street leading to a central court of cobble-stones, from which opened numerous rooms. Some may have had a second story, and all had one room of an unusual type. This appeared to be the principal room of the house, and had a floor with a large rectangular depression in the centre paved with pebble mosaic, sometimes in patterns, and surrounded with a raised border of hard cement, the whole of the central portion sloping slightly toward a drain-hole at its lowest corner. The walls of these rooms were built, like the rest of the houses, of sundried brick, but were lined with a fine hard polished plaster of a creamy white or "Pompeian" red. The ceilings had a similar plaster, either white or yellow. Several pottery bathtubs have been found in the houses, one in a bathroom with a floor tiled with marble slabs. Further evidence of the extensive use of water by the ancient Chalcidians of Olynthus is provided by the lines of terracotta waterpipes leading to cement-lined cisterns in various parts of the city and feeding a fountain near the bottom of the paved road leading up from the plain. The water itself had to be brought some distance from the mountains to the north of the city. Among the smaller finds were a life-size marble head of Hera, some fine vases, and a very unusual series of terracotta figurines, with many moulds for making them, found in what must have been a terracotta factory on one of the side hills adjoining the Acropolis. One of the finest of the moulds shows a figure of Cybele with elaborate headdress, earrings, and necklace, and holding a large drum. In the adjoining shops great numbers of coins were found scattered upon the floors, lost, probably, at the looting of the city by Philip's soldiers. The majority of the fifteen hundred or more coins found in the various parts of the excavations are Olynthian, issued in the name of the Chalcidians of that city. Others are the issues of neighboring cities, members of the League; while a few are coins of the Macedonian kings before Philip, and still fewer of that enemy of the Chalcidians, Philip himself.

E. P. B.

BOOK REVIEWS

ANTIKE DENKMAELER, herausg. vom Deutschen Archäologischen Institut. Bd. IV. 1 Heft: *Denkmaeler spätantiker Kunst*, herausg. von Richard Delbrueck. Berlin, 1927, de Gruyter and Co. Plates 1-10, with 11 pages of text; folio.

This is the first fascicle of the collection of reproductions of monuments of the art of late antiquity that is to be edited for the *Antike Denkmaeler* by Delbrueck. It contains plates of the reliefs ornamenting the silver reliquary of the Church of S. Nazaro at Milan, of the two ivory plaques known as the Milan book-covers preserved in the treasury of Milan Cathedral, of the diptych in Monza with reliefs representing a poet and a muse, and three plates in color giving details of the famous mosaics in S. Vitale at Ravenna that depict Justinian and Theodora, with their suites, bringing their offering of chalice and paten to the church.

The text on the ivories and the mosaics offers little that is new beyond the welcome detail of the descriptions, in which some hitherto unobserved points are noted, notably the remnant of a painted inscription on the Virgin-relief of the S. Nazaro reliquary. E. Baldwin Smith's material has been the chief source for Delbrueck's discussion of the Milan ivories, of which he incidentally says, without giving his reason, that they "cannot be book-covers." The author's reading of Baldwin Smith (*Early Christian Iconography*, Princeton, 1918) must, however, have been somewhat limited; otherwise he would hardly have dismissed the attribution of the plaques to Southern Gaul with the remark (p. 8, note 2) that it rests on an "Oriental influence" manifest in the iconography and that such an Oriental element is not confined to Provence. Baldwin Smith's attribution was supported by strong iconographic and stylistic peculiarities common to the plaques and to the Gallic works of the period, and was by no means confined to the eastern features found in the reliefs. Delbrueck agrees with Baldwin Smith's demonstration of the western origin of the ivories.

The Monza diptych is placed by Delbrueck in the school of the Cathedra of Maximianus, and dated about A.D. 500, which date and classification will probably be acceptable to most students of the late antique. The citations of the consular diptychs of Anastasius and Areobindus are natural ones in this connection for the editor of the *Corpus Diptychorum*; the full comparative material in Capps' article on the "Style of the Consular Diptychs" (*Art Bull.* X, 1927-8, pp. 61-101) appeared too late for Delbrueck's bibliography.

The chief interest of the publication lies in its canonization as "antique" of the silver reliquary of S. Nazaro at Milan. The reviewer pointed out in the *JOURNAL* of 1919 (pp. 101-125) the difficulties that beset acceptance of the fourth century date. The eye-witness who was present when the reliquary was exhumed in 1578, Carlo Bescapé, makes no mention of the reliefs that adorn the present casket in spite of his otherwise careful description of all details of the find, and in spite also of his anxiety to prove that the objects contained in the box were "relics of the apostles," a contention which would have been confirmed by the reliefs. While the reliefs in style and iconography stand completely apart from anything else in Early Christian art, they find good parallels in the art of the sixteenth century. Since the objects exhumed at S. Nazaro in 1578 by order of Carlo Borromeo were not re-interred until the following year, the reviewer in the article cited above arrived at the conclusion that the present reliquary with its decidedly un-antique reliefs is not the original one, but another substituted in 1579 by the archbishop,

doubtless because the condition of the original reliquary made it unsuitable for the re-interment.

New interest in the question had already been aroused before the issue of the present number of the *Antike Denkmäler* by a note in Neuss' *Kunst der alten Christen* (1926, p. 143), in which he records the information received from Delbrueck that the JOURNAL article was wrong in stating "dass nach den Fundberichten von den Darstellungen nicht die Rede sei. Das Kästchen wird vielmehr beschrieben, wie es noch heute sich vorfindet." This seemed to indicate that Delbrueck was in possession of new material on the exhuming of the casket that would definitely date it in the fourth century.

The new material is briefly set forth in the text that accompanies the plates of the reliquary: "Giussano mentions the reliefs," with a note quoting the relative passage in G. P. Giussano's *Vita di S. Carlo Borromeo* (Rome, 1610), "Unter dem Altar in der Mitte der Kirche fand sich *una cassetta d'argento effigiata artificiosamente di varii misteri della passione di Christo nostro Signore, nella quale erano alcuni veli et un vasetto rotondo, con un pezzetto di osso dentro, rivolto in altro velo.*" The testimony of Giussano is thus set before the reader as independent proof of the existence of the reliefs on the reliquary found in 1578.

Suspicion of Giussano's value as independent testimony on the discovery of 1578 is, however, aroused by his *varii misteri della passione di Christo*,—there being no Passion-scene on the casket. We find light on the source of his information on the find of 1578 from the rest of the passage quoted by Delbrueck, which faithfully translates into Italian the Latin of the eye-witness of the event, Carlo Bescapé: *in medio arculam argenteam: et in ea quaedam relamina; vasculumque rotundum, in quo ossis frustulum itidem cum velo erat.* In the same chapter from which Delbrueck's citation is drawn, Giussano cites his source clearly enough in his allusion to the discovery at S. Nazaro: *essendovi presenti alcuni de' suoi Canonici, & in particolare Monsignor Carlo Bescapé, poi Vescovo di Novara, il quale riferisce quest' attione compitissamente nell' historia sua.*

Whence, then, comes Giussano's mention of the reliefs? He evidently did not see the casket when it was discovered in 1578, and Bescapé tells us that the objects found on that occasion were kept in sealed receptacles until the solemn translation of the following year (*in loculis signatis asservari*), by order of the archbishop. But Giussano was an eye-witness of this translation of 1579, to judge from his circumstantial account of it, and must have had a glimpse of the reliquary as it appeared at that time,—a fleeting glimpse, since he mis-names the subjects of the reliefs.

We have, then, the detailed account of the discovery of the reliquary in S. Nazaro by the eye-witness Carlo Bescapé, which mentions no reliefs, and mention of the reliefs by Giussano, who must have seen the casket at the time of its re-interment the following year. So far as Bescapé and Giussano can be considered as independent *testimonia*, they show that the casket of 1578 had no reliefs, while that of 1579 had reliefs, which is precisely the conclusion reached by the reviewer.

The reliefs in question are carefully described by Delbrueck, and beautifully reproduced, so beautifully, in fact, that an eye used to the descriptive nicety of late antique reliefs, however debased their style, finds it harder than ever to accept the impressionistic sweep of these compositions, wholly in the technique of the Italian plaquettes, as works of the fourth century. Delbrueck himself has his difficulties with them: "An dem Kaiserkostüm des Salomon sind Diadem, Fibel, Schuhwerk nicht ganz richtig, was auf Münzen oder Mosaiken nie vorkommt, die Sessel des Christus und der Maria sind keine Kaiserthronen, wie sonst immer in dieser Zeit." He stresses the "laute und leidenschaftliche Benehmen der Menschen, und die vulgär hübschen lebhaften Gesichter der Statisten" as indications

of an "unhöfisch" art; it seems to the reviewer more than ever that the adjective should be "unantik."

This may be a matter of opinion; not so, however, with the iconographic difficulty, which Delbrueck simply ignores. No real iconographic parallels have yet been found in the whole range of Early Christian art for any one of the scenes on the casket. Our author's discussion of this highly important factor in the problem of date is limited to the observation: "Rom und sein Bereich werden aber beinahe ausgeschlossen durch den Umstand, dass der Gegenüber des Paulus (in the scene on the lid) schwerlich Petrus sein kann." He finds stylistic relation between the reliefs and "East-Roman" miniatures, such as those of the Joshua Roll and



ST. PAUL: DETAIL OF RELIQUARY
OF S. NAZARO, MILAN



ST. PAUL: S. LORENZO EL REAL,
ESCURIAL, BY LEONE LEONI

the Codex Rossanensis, without apparently being troubled by the fact that the manuscripts cited are poles apart in style.

"Uebrigens ist mir unter den Mailänder Metallarbeiten der Zeit des Karl Borromaeus, die allein in Betracht käme, nichts irgend Ähnliches begegnet." May the reviewer suggest, in addition to the Renaissance parallels cited and reproduced in the JOURNAL article, and instead of a hopeless comparison with the Joshua Roll and the Rossanensis, the essential similarity between the two Pauls here reproduced, in their common pseudo-classic character as well as in the structure of the head and the delineation of the beard? One is the St. Paul of the lid of the casket of S. Nazaro; the other is one of the statues on the high altar of San Lorenzo el Real in the Escorial, for which Leone Leoni was making the models in Milan in 1578-79, during the months when Carlo Borromeo was preparing for the solemn

re-interment of the relics of San Nazaro. Certainly we will find in these heads far more kinship than exists between the reliefs and anything in late antiquity. Such a quest seems even more hopeless since the publication of Delbrueck's fine plates; a recent and somewhat amusing attempt of the sort is Neuss' citation of the apostles in the apse of S. Pudenziana at Rome, a good half of whom are restorations of the nineteenth century!

C. R. MOREY

PRINCETON, July, 1928

OUR EARLY ANCESTORS. An Introductory Study of Mesolithic, Neolithic, and Copper Age Cultures in Europe and Adjacent Regions, by *M. C. Burkitt*, 243 pp. and 30 plates. Cambridge University Press, 1926.

The author gives two reasons for writing this book. In the first place very few textbooks covering this particular field have been published; secondly, the need of such a work was felt by himself as lecturer to university students as well as by the students themselves. He admits that this long and painstaking job is still far from completion, even as far as Europe is concerned, and that it will be many years before the work is in any sense finished.

Our knowledge of the Old Stone Age, especially that portion of it known as the Paleolithic, is now fairly well crystallized and forms a safe basis on which to build a superstructure, which will form a link between prehistory and protohistory.

The volume begins with that period which was once known as the hiatus—a period bridging the gap between the Magdalenian Epoch with its reindeer fauna and realistic cave art and the culture known as Neolithic. This supposed hiatus has vanished before our advancing and cumulative knowledge and in its place we now have the Mesolithic Period.

Measured by Paleolithic standards, the Mesolithic Period covers a relatively short space of time. Regionally it is represented by cultures differing slightly in fact as well as in name. The Azilian of Piette with its painted pebbles and flat harpoons of staghorn; the Tardenoisian of de Mortillet with its microliths; the Asturian of Count de la Vega del Sella; and the Maglemosean of Sarauw all go to make up the Mesolithic complex. And in recent years there is a tendency to detach the first or lowest rung of the Neolithic ladder and add it to the Mesolithic; I refer to the Epoch of the Shell Heaps in Denmark and its equivalent, the Campignian, in France.

"Neolithic Civilization" comes in for the lion's share of space. The most notable additions to human experience during the Neolithic Period are: (1) the domestication of animals and plants, (2) the manufacture of pottery, and (3) the pecking, grinding, and polishing of stone tools instead of mere chipping as a shaping process. A chapter is devoted to Neolithic typology, made all the more valuable by a well-selected series of plates.

Then comes "A Brief Sketch of England in Mesolithic, Neolithic, and Earliest Metal Age Times"; while the last three chapters out of a total of ten treat of "The Mediterranean Area and the Copper Age," "Preliminary Notes on the Bronze Age Cultures" (not envisaged in the title of the book), and "Art."

The author is taken to task by no less an authority than Sir Arthur Keith for making no attempt to fix in years the duration of the cultural epochs covered by the volume. The serious student of prehistory will not be disturbed by the omission; the general reader, however, is glad to have such details even though they have to be in the nature of the case only approximations or enlightened guesses.

A fairly long and carefully selected list of references is added at the end of each chapter, enabling the student to delve deeper into the mines of information now

at his disposal. The present volume is not the first from Burkitt's pen and we hope it is not to be the last.

GEORGE GRANT MACCURDY

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THE COINAGES OF DEMETRIUS POLIORCETES, by *Edward T. Newell*, pp. ix, 174; plates XVIII. Oxford University Press, American Branch, New York, 1927.

Newell's latest contribution to the numismatic history of the Epigoni brings order out of the chaos which has hitherto existed in the coinage of Demetrios, the Taker of Cities. This new study is in reality a Corpus of the coins issued by Poliorketes, an undertaking not previously attempted. Not content, however, with a mere list of the pieces now known, Newell, after grouping the coins by the aid of types, monograms, and other criteria, has assigned them to the different mints of the king's fluctuating empire. His discovery that the monograms, except for bronze issued at the Amphipolitan mint, represented neither the mint nor the name of the king, being simply control marks with which the responsible magistrates signed the coins issued by them, has made it possible to supersede old theories as to mint origin with new hypotheses which have intrinsic probability in their favor, most of which can be accepted as proved.

Not only is Newell able by his close study of a multitude of specimens, of which more than one hundred are in his own cabinet, to assign the coins to definite mints, Cyprian Salamis, Tyre, Tarsos, Miletos, Pella, Amphipolis, Thebes, Demetrias, Chalcis, and Demetrias-Sicyon (?), but for the most part he can date the coins within very close limits. The fact that we have a complete series of annual issues from the mints of Pella and Amphipolis for the six years of Demetrios' rule there makes it possible to ascertain the exact year, 291/0, when the word ΒΑΣΙΛΕΥΣ took the subordinate position at the left of the reverse type. Changes of type can also be dated exactly at the two Macedonian mints, and with these as a standard the dates of coins issued by other mints can be determined.

In assigning series of related issues to definite mints, Newell is especially felicitous. As an example of close observation and nice reasoning, I shall mention merely the section on the Theban mint. Here the proof of Newell's attribution is furnished by an autonomous Theban coin unmistakably from the hand of the artist responsible for the tetradrachms assigned by Newell to this mint, Plate XV, 3, 5, 7; "the Poseidon heads so identical that they are absolutely interchangeable. Every hair, every contour, every line is identical."

Historically the study is of importance in that it gives a numismatic picture of the vicissitudes of Demetrios' career paralleling very closely the picture which we get from literary sources. We see the mints working overtime in conjunction with the dockyards building ships for this son of Poseidon. We see the disorder in the mints when siege or threatening calamity made careful work a matter of little importance. The very types depict the adventurous character of Demetrios, and his life of danger and debauch is clearly displayed in his coin portraits. For the first time in European Greece the undeniable portrait of a living man appears on coins.

Although Newell has not been able to identify the statues from which the die-cutters took some of their types, nevertheless he has done much for the elucidation of the types themselves. Most convincing is his interpretation of the Poseidon type which Demetrios chose in 291/0, pp. 89 ff. The god, with his foot planted firmly upon a rock, looks "over his wide and watery domain," proclaiming, as it were, "his dominion over both land and sea." Such a type, Newell shows, was appropriate "to Demetrios' character, to his viewpoint at the time, and to his

immediate plans." It was no brutal reference to the capture of Athens in 294, as Svoronos suggested; and the rock upon which rests Poseidon's foot is certainly not the Acropolis. What statue was here copied remains "an intriguing but an unsolved mystery." Readers who wish to pursue the question further will be interested in an article by Salvatore Mirone, *Copies de Statues, Rev. Num.*, 1926, pp. 6-17.

The winged victory of the earlier coins commemorating the naval triumph of Demetrios at Salamis, when all seemed lost at Ipsos, leads naturally to a discussion of the victory of Samothrace, pp. 31 ff. While Newell inclines to the view that the statue had no connection with Demetrios, he points to one "curious coincidence." The coins which most resemble the Samothracian statue were struck in the near-by mints of Pella and Amphipolis, whereas the die-cutters of Cyprus, Tarsos and Miletos, whose work could have been inspired only by word descriptions or sketches, give a very free rendering of the details of the supposed original.

The volume is beautifully printed by the Oxford University Press, and the plates are both ample and excellent. Only one serious slip has been found by the reviewer. The bronze coins, nos. 125-133, assigned on page 118 to the mint at Pella, are, of course, from the Amphipolitan mint, as is made clear by the text, p. 120.

ALLEN B. WEST

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SELECT GREEK COINS. A series of enlargements illustrated and described, by *George F. Hill*, Keeper of Coins and Medals, British Museum, pp. 61, with 64 collotype plates of 266 pictures of coins. *Librarie Nationale d'Art et d'Histoire*, G. Vanoest, Publisher, Paris and Brussels, 1927.

The gifted compiler of this volume has ventured upon the daring experiment of presenting a long series of ancient coins magnified three diameters, and the result on the whole is extremely satisfactory. The work of the great engravers bears the enlargement well; on the other hand, speciousness and shallow technique on the part of the inferior engravers is often exposed.

The designs are arranged on the plates roughly according to subject: male heads, female heads, single figures, figures grouped with animals, chariot groups, animals, monstrous beings, plants, and inanimate objects. In the short introduction only the salient points in the development of Greek numismatic art have been covered. This has been as well done as the space would permit. A description of plates and a list of them follows.

The book is obviously intended for a wider circulation than for specialists. The inscriptions on the coins are transcribed in Latin letters, learned references are generally omitted, as well as all notices of the provenance of the specimens from which the plates were made.

For the making of slides or for use in the reflecting lantern the plates will prove of immense value and the book as a whole will be a valuable adjunct to teachers and students of Greek art.

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CHALKIDISCHE VASEN, im Auftrag des Archäologischen Institutes des Deutschen Reiches mit Benutzung der Vorarbeiten von *Georg Loeschcke* herausgegeben von *Andreas Rumpf*. Text, xii+203 pp., 18 figures. Two portfolios, 222 plates. De Gruyter, Berlin and Leipzig, 1927. M. 100.

Six years ago Rumpf established himself as an authority on Chalcidian pottery by an important article proving that Phineus ware belonged to it. He was then

appointed by the German Archaeological Institute to complete Loeschke's investigation of Chalcidian. The monograph which he has now produced acceptably determines the boundaries of the class, reproduces almost every specimen, and studies the characteristics and problems of Chalcidian very carefully and acutely, throwing much new light on all its aspects but especially upon its internal classification and its development. The book must rank as an independent work; Rumpf has both pruned and greatly extended Loeschke's list, and his treatment of the material is original. The text is in seven chapters: (I) Surveys the work of predecessors. (II) Gives a list of true Chalcidian vases and fragments (279 items, each with bibliography). (III) Treats the inscriptions and the problem of origin. Rumpf prefers to locate the ware in Chalcis, rejecting on grounds of technique recent theories of its origin in Italy. (IV) Classification. Nine especially prolific painters are distinguished and the bulk of the vases divided among them. The limits of Chalcidian are fixed by reference to the inscribed vases. A sound method underlies the brilliance of this chapter, and its results seem incontestable on the whole, though the author may have dealt too boldly with some of the minuter fragments (is the panther's head on No. 71 Chalcidian in type?). Rumpf overlooks an undoubtedly Chalcidian eye-cup at the University of Pennsylvania (MS. 4864; Luce, Catalogue p. 64, saw it was akin to Phineus ware), with interesting "sketching" and *vertical* guide-lines. The piece seems to me to be by the decorator of the Madrid cup (No. 255), to whom I think we can also give Rumpf's No. 251 and perhaps his No. 250 and a singular cup in Florence (Hallisches Winckelmanns-programm, III, pl. ii, 3). The University of Pennsylvania, with two amphorae already in Rumpf's corpus, has yet a fourth Chalcidian specimen in a strange convex plaque, if I may judge by the soapy surface, perished varnish and characteristic lotus-type. Its provenience, if this could be traced, would be important for the question of origin, since the object looks like one made for local use. I no longer think that it was found in Italy. (V) This chapter deals with shapes and technique. It is influenced by Neugebauer's denial of a Chalcidian toreutic, a view with which Rumpf's theory of the Chalcidian origin of the very metalloid krater-form seems inconsistent. We might indeed hold, against Rumpf, that this form came from Laconia via Corinth, as is suggested by echoes in Chalcidian of scenes and even inscriptions on Corinthian kraters of this type, which occurs and seems more at home in Laconian. But most of the metalloid forms of Chalcidian earthenware seem native, and the only thing which could make Neugebauer's scepticism plausible would be the discovery that "Chalcidian" was, after all, Italiote. The latter's arguments are not confirmed by the divergences between the plastic accessories of reputed Chalcidian bronze vases and early Chalcidian vase-painting, the style of which is so much determined by imitation of Corinthian drawing. (VI) This chapter, on the relations of Chalcidian within black-figured vase-painting, does not ignore, but underemphasizes, the influence of Corinthian on the earliest Chalcidian, which borrows more Corinthian conventions than Rumpf notes (add to his list, lions' eyes, the incisions under horses' eyes, white Pseudo-Bocotian shields, and especially, the upper part of peploi, in form unlike the Attic, Laconian, or Island types, but recalling Corinthian fashions). It is significant that Corinthianizing Attic work has been often taken for Chalcidian. But Rumpf is convincing in minimizing Eastern influence (perhaps add to the Eastern elements fourfold plumage, perhaps subtract the filling buds), while his treatment of development and chronology is masterly and furnishes new criteria for the dating of archaic art. (VII) Pseudo-Chalcidian vases are discussed.

The plates, mostly from photographs, are good. It is a pity that in this classic

work wrong reference numbers should be so frequent in the text, while the top of Plate XLIV shows the Würzburg cup, not the Madrid piece, and Figure 14 is of the Pseudo-Chalcidian No. XVIII (not XVII).

H. R. W. SMITH

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STAGE ANTIQUITIES OF THE GREEKS AND ROMANS AND THEIR INFLUENCE, by *James Turney Allen*. In the series, "Our Debt to Greece and Rome." xii + 206 pp., with 24 illustrations. New York: Longmans, Green and Co., 1927. \$2.00.

The author, an authority on the Greek theatre, condenses within 165 pages the essential facts about Greek and Roman drama, dramatic festivals, theatres, actors and the chorus, costumes, properties and scenery, with a special treatment of the Theatre of Dionysus at Athens. In two brief concluding chapters he sketches the influence of the classic theatre and drama during the Renaissance. The treatment of both Greek and Roman stage matters in one volume—a feature almost unique in modern handbooks—increases the usefulness of the book to all students of the drama except specialists. This union of Greek and Roman dramatics is logical. The influence of the Greek drama was directly upon Rome and only mediately upon the modern stage. In the fourteenth and fifteenth centuries it was Vitruvius, Seneca, Plautus and Terence to whom theatre-builder and dramatist turned. "Greek tragic form flourished only among the Greeks: for the rest of the world it has been . . . exotic." "Old Comedy cannot claim a numerous progeny." Modern opera, however, "was in part the child of Greek drama" (p. 180 ff.).

The author is compelled by his theme to deal largely with facts and technical matters, but he gives more than a summary exposition. He continually links the history of the stage with the culture and taste of each period, pointing out, for example, that magnificence of theatre buildings and wealth of properties have not been matched by greatness in the drama itself. He also emphasizes the need, too often unfelt even by modern authorities, of analyzing and dating the evidence, both literary and archaeological, in estimating the characteristics of ancient drama. He regards the view that there was little action in the Greek drama of the fifth century as a misconception arising from the failure to notice that much of the evidence for this view comes from the decadent period of tragedy. On the stage question he holds that there is no incontestable evidence for a raised stage at Athens before 150 B.C.

SAMUEL E. BASSETT

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VIE DE PETOSIRIS GRAND PRÊTRE DE THOTH A HERMOPOLIS-LA-GRANDE par *Émile Suys*. Avec une Préface de Jean Capart, Bruxelles, Édition de la Fondation Égyptologique Reine Élisabeth, 1927, pp. 158.

This book is a popular description of the tomb of an Egyptian high priest and a description of his life as that life was depicted on the walls of his tomb. It is in many ways an unusually interesting life, and as it fell in the closing years of the Persian empire and the early years of the Macedonian domination of Egypt, it has great fascination for the historian.

In 1919 the Egyptian Department of Antiquities learned from some Arabs of the existence of an important tomb in the hills to the southwest of the village of Ashmunen, which is four miles west of Rôda, a railway station 176 miles above Cairo. The tomb was explored by M. G. Lefebvre in the winter of 1919-20, who in 1923-24 published the plans and texts of the tomb in three great volumes. As

the volumes of Lefebvre are expensive and to many people inaccessible, Capart encouraged Suys to write the volume before us. Suys has done his work well. He gives but few pictures of the tomb, but devotes himself to the life and times of Petosiris as portrayed in the texts from it. Petosiris appears to have been born about 383 B.C. and to have lived until about 320 B.C. or later.

The architecture of the tomb is of the pure Egyptian type. In form the structure reminds one of the Temple of Dendera, though the pillars of the tomb are more like those of the Temple of Philae. On some of the walls the work on the estate of Petosiris is portrayed after the manner of the tombs of the nobles of the Old Kingdom (Vth Dynasty). These are in true Egyptian form. On other walls sacrificial processions are pictured, and these are more Greek than Egyptian, revealing the fact that the Greeks, who for military purposes had been encouraged to settle in Egypt three hundred years before, had begun to exert a profound influence.

Petosiris came of an old high-priestly family at Hermopolis. His father was Sishu, and his grandfather Zedthotefankh—the last a name borne also by the elder brother of Petosiris.

The first chapter of Suys's book gives a vivid account of the education of Petosiris, telling how he learned hieroglyphic writing, and recounts the pedagogical methods of Egypt in the fourth century B.C. The second chapter introduces us to the joys and sorrows of the life of Petosiris from his eighteenth year, when he was made a priest of the god Khnum, until the conquest of Alexander the Great. His brother died, and the funeral ceremonies are described and illustrated. He enjoyed the favor of King Teos (Zeher), suffered in the troublous times of Artaxerxes Ochus, and spent his days in the faithful performance of the duties of his priesthood. When Egypt was conquered by Alexander the Great, Petosiris was advanced to the high-priesthood and made the king's viceroy, at least for his district. He was given the standing of a son of the god Khnum. In his capacity of substitute for the king he offered sacrifices for the Two Lands, Upper and Lower Egypt. The solemn ceremonies are described and the hymns used on the occasion recorded. Similarly the festival of the New Year and other festivals are described, as well as the extensive building operations of Petosiris. It is, perhaps, ungracious to suspect the veracity of this ancient Egyptian, but the fact ought not to be concealed that at some points in this part of his texts the wording reminds one strongly of similar inscriptions of Ramses III. Petosiris regarded himself as especially the priest of Khnum, though the god Thoth (a much more important Egyptian deity) sojourned in his temple.

At this point in the career of Petosiris his father died and he built a tomb for him and for his grandfather Zedthotefankh, recording on the walls the proper inscriptions, together with reflections upon the land of silence. A chapter is also given to the agricultural life which went on on the estates of Petosiris and of the temple, together with reflections as to the value of labor.

In a concluding chapter the author sums up, on the basis of the description in the texts, the character of Petosiris. He finds that he practised simplicity in living and in clothing; he was temperate, austere, just and disinterested. He and Egyptians of his class were persuaded that the virtue of a man was the measure of his fame. By contemplation they arrived at reverence, at security of the soul, and at piety; by reflection on knowledge and by the aid of the gods, at the practice of the ancient customs in a manner worthy of the ancient time.

M. Suys has performed a useful service by making accessible to a large public the material from the tomb of Petosiris. It gives a cross section of Egyptian religion and morals at a time when, through foreign admixture, the old practices

and ideals had begun to change. It is a picture full of interest and charm, for the Egyptians, though conservative as to religious forms and possessed of little philosophic power, were among the foremost of ancient nations in the power to grasp the significance of moral values and to give them practical expression.

GEORGE A. BARTON

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THE CAMBRIDGE ANCIENT HISTORY. Edited by *J. B. Bury, S. A. Cook, and F. E. Adcock*. First volume of plates prepared by *C. T. Seltman*. xxviii+395 pp. The Macmillan Company, New York.

This volume is partly designed to illustrate Volumes I-IV of the *History* itself and partly as a record of man's achievement in art and craftsmanship from the palaeolithic age to the end of the sixth century B.C. After a representative collection of palaeolithic and neolithic implements and art, the first section (pp. 1-123) portrays the artistic achievements of Egyptian, Mesopotamian, and Minoan culture down to the end of the third millennium. The largest portion (pp. 90-123) is devoted to the Minoan or Aegean Civilization, and the selection of plates has been made by Mr. Wace. In his descriptive commentary he states concisely the main characteristics of the various types of pottery, and wherever possible he indicates the influence of other civilizations on or by the various styles. The second section (pp. 126-211) shows the development of art in the second millennium B.C., particularly in Egypt, Crete, and Mycenae. The high degree of perfection attained by Egyptian sculptors is shown in the plates selected by Mr. T. Eric Peet and Mr. H. R. Hall (pp. 126-153). Mr. Wace has made the selection for Crete and Mycenae (pp. 154-181), while Mr. Halliday draws upon Minoan art to illustrate the early religion and mythology of the Greeks (pp. 194-211). In the third section (pp. 214-279) Mr. Sidney Smith has chosen the illustrations for Assyrian art, Mr. Hogarth for Hittite, Mr. H. R. Hall for Egyptian, Mr. E. H. Minns for Scythian, and Mr. Wade-Gery for Early Dorian. The fourth section is devoted chiefly to early Greek art (pp. 282-395), seven plates being given to Persia and nine to the Etruscans. In selecting the material to illustrate early Greek art Mr. Beazley (pp. 344-383) has for the most part chosen subjects which portray the influence of the Orient. Mr. D. S. Robertson (pp. 384-393) has selected architectural types to show the development of the Doric and Ionic orders.

This volume is valuable as a supplement to history, and is particularly interesting in its portrayal of the development of sculpture, painting, and some of the minor arts. The plates are accompanied by concise but excellent descriptive matter which is given in every case on the opposite page. Except for Greek architecture, the builder's art is almost entirely neglected. There is a view of the site of the temples at Dêr El-Bahri in Egypt, but the scale is so small that no details can be distinguished. Reconstructions of temples and palaces, even if all details cannot be certain, are important in giving an idea of the civilization which grew up around them. For example, von Bissing's reconstruction of the palace of Cyrus at Pasargade and of Darius at Persepolis, and Koldewey's restoration of the temple of Marduk at Babylon might have been included. While the majority of the plates are clear, some leave much to be desired in this respect. This is especially true of the coins which seem to have been reproduced from plaster casts rather than from originals. However, in spite of these defects, the volume as a whole gives an excellent perspective of the development of ancient art and of the influence of the Orient upon Greek culture.

ALLAN CHESTER JOHNSON

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THE ARCHITECTURE OF ANCIENT ROME. An Account of its Historic Development, being the second part of the *Architecture of Greece and Rome*, by William J. Anderson and R. Phené Spiers. Revised and rewritten by Thomas Ashby. Pp. 202, 94 plates. New York: Charles Scribner's Sons, 1927. \$7.50.

This book is far more than a revision of Spiers' contributions to the well-known "Architecture of Greece and Rome" that appeared twenty-five years ago. Mr. Ashby has completely rewritten several portions, and has made additions on every page. It is not an easy matter to insert the pertinent facts of recent archaeological discoveries into a volume intended chiefly for students of architecture; but Mr. Ashby has with remarkable restraint succeeded in pouring the new material into the old mold. The most important additions will be found in the chapters on early architecture, in the discussion of materials and modes of construction, in the description of vaults and domes and in the survey of domestic architecture as revealed by the excavations of Ostia and Pompeii.

One of the best features of the book is the admirably sane use made of the keen but sometimes wayward work of Delbrück and Rivoira, both of whom seemed to lack the historical sense that is so desirable in this field of work. Ashby has also a wholesome respect for accurate description of actual remains, and in this volume he has used it to eliminate fancies that have been reproduced in book after book from the imaginative drawings of an earlier period. He has himself had so large a share in discovering and studying such drawings that his criticism of them is doubly valuable. Our only regret is that Mr. Ashby has not here completely broken away from Anderson and Spiers and written an independent history. We should like from his hand a large work that might take the place of both Middleton and Rivoira.

Here and there a few errors of the original have slipped back and at times also Mr. Ashby has repeated some of his own conjectures with insufficient criticism. The Tullianum is placed too early, and the handsome vaults in front of the Temple of Saturn he boldly dates before similar work elsewhere in Italy and in Greece (p. 3). It is also difficult to accept his early instances of anathyrosis, and the foundations of Venus Cloacina and of Lacus Curtius are hardly deep enough to justify his dating. Delbrück's history of concrete (29) is quite too fanciful to deserve acceptance; the Mausoleum of Augustus was built in 28 B.C., not in 14 A.D., and the notes on brick (p. 34) seem to me misleading. Is there any evidence that the clay banks behind the Vatican were used by the Romans? Certainly the early Republican tiles were of the same brick-earth as were the bricks of the early Empire. In regard to materials the author's memory has sometimes slipped (pp. 71 and 125), and it is not quite accurate to say that the Porta Maggiore was built to be an entrance gateway. One might also question the wisdom of repeating (p. 50) the old criticism that the Romans failed to see that decoration should emphasize structural function. Because of the lack of desirable material they had to build with concrete, and concrete then, as iron now, practically compelled the use of non-structural decoration.

Finally many of us had hoped that the time was ripe for a more adequate description of the architectural stucco-decoration of the Ciceronian period, a fuller treatment—along the lines begun by Toebelmann—of the evolution of architectural design, and a much fuller description of the architecture of the period of extensive building operations before and after the Gracchi. These things Mr. Ashby could give if he were allowed adequate space. However, these are minor matters. The book is now the most readable and reliable survey that we have of Roman architecture. Very many valuable plates have been added and the illustrations are excellent.

TENNEY FRANK

JOHNS HOPKINS UNIVERSITY

UR EXCAVATIONS, Volume I, AL-'UBAID, by H. R. Hall and C. L. Woolley. *Publications of the Joint Expedition of the British Museum and of the Museum of the University of Pennsylvania to Mesopotamia*, pp. 1-244; pls. I-LXVIII. Published for the trustees of the two museums by the Oxford University Press, 1927. \$15.00.

The entire excavation of the ruins of an ancient city in the Tigris-Euphrates valley is a fascinating work. If the site under investigation is extensive and contains the remains of Sumero-Babylonian culture stretching over a long era, the finds are bound to be of unusual importance. However, it is possible to obtain excellent antiquities from inconsiderable débris, as the archaeologist's spade may secure surprising objects from a comparatively small mound which was occupied during a certain period of early history and then entirely abandoned. The remarkable discoveries at Tell al-'Ubaid are proof of this.

General attention and scientific interest are aroused by preliminary notices of discoveries, but the scholarly world craves exhaustive treatment in official volumes. If precision and care must be exercised in recovering antiquities from a mound, an even greater degree of exactness must be cultivated in the publication of results. Both these requirements have been met so far as Tell al-'Ubaid is concerned. The experience of H. R. Hall and C. L. Woolley as excavators of early sites of human habitation and their skill as interpreters of archaeological finds may be regarded as guaranteeing the completeness and accuracy of a volume the main portions of which were written by them. The same dependence can be placed upon the work of C. J. Gadd, who describes the archaic inscriptions which were found, and upon the contribution of Sir Arthur Keith concerning the skeletal remains which were exhumed. These four men have collaborated in the production of a book which will ever be valued as a masterpiece of clear presentation, logical arrangement, and scientific deduction. As a forerunner in the series dealing with the excavations at Ur it is an alluring prophecy of what is to come.

Two brief campaigns of excavation at Tell al-'Ubaid, located about four miles northwest of Ur, yielded the antiquities which are described in the volume under review. One was conducted by Mr. Hall in 1919 for the British Museum in connection with work at Ur and Eridu; the other was directed by Mr. Woolley in 1923-24 for the British Museum and the Museum of the University of Pennsylvania in connection with work at Ur. The archaeological value of the finds proved extraordinary for a site no greater than 150 feet in length and 30 feet in height. Ruins of a Sumerian sanctuary of the fourth millennium B.C. and human bones of two different periods of burial were unearthed. In addition the temple débris and cemetery deposits furnished objects of cultural significance, such as flint artifacts, stone utensils, copper implements, pottery remains, personal ornaments, primitive reliefs and friezes, and inscribed tablets.

Each section of the report is a mine of information in itself, and hence the combined discussions throw an unusual amount of light upon early Sumerian life in southern Mesopotamia. Archaeological facts, epigraphical material, and anthropological data are made to supplement one another in producing a reconstructed picture of the social, artistic, and religious activities of a miniature but interesting ancient community. Every object found at Tell al-'Ubaid is given its proper place in the process of restoring the mosaic of a past civilization. This is done with such scrutinizing care and critical weighing of evidence that the chances of error in drawing conclusions are reduced to a minimum. The detailed cataloguing of all the antiquities found, together with an enumeration of their characteristics, is of particular value to the student of Mesopotamian archaeology who wishes to make his own deductions.

In a few short paragraphs it is difficult to give a satisfactory summary of the contributions to knowledge which the Al-'Ubaid volume provides. The cause of Sumerian archaeology is helped greatly because a new conception of the artistic skill and architectural capabilities of the Sumerians of the fourth millennium B.C. is afforded. The difficult science of Mesopotamian pottery receives impetus from the welcome discussion of numerous specimens of early painted ware. Certain features of archaic cuneiform epigraphy are presented with fresh emphasis. Sumerian history in the Ur sector is enriched with the name of a new king, A-anni-padda, son of the king who is listed as the initial ruler of the First Dynasty of Ur. A better understanding is obtained of the goddess Nin-khursag, "lady of the mountain," the patron deity of the temple which was discovered. An unexpected anthropological estimate of the Al-'Ubaid people, linking them with Arabs, is given in the closing chapter of the book.

A profusion of excellent illustrations, consisting of photographs, drawings, reproductions in color, and autographed copies of texts, characterizes the volume. The sixty-eight plates which are devoted to these pictorial representations add to the real value of the publication. However, they do not cause an overbalance of merit in the book, for the literary quality of the descriptive sections is equally worthy of praise. The authors are to be commended for having contributed so extensively and so attractively to the source material of archaeology.

RAYMOND P. DOUGHERTY

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TOPOGRAPHIE HISTORIQUE DE LA SYRIE ANTIQUE ET MÉDIÉVALE, by René Dussaud, pp. lii, 632, with 16 maps. Published for the Haut-Commissariat de la République Française en Syrie et au Liban by Geuthner, Paris, 1927. 200 Frs.

The Mandate for Syria has given French scholars an unparalleled opportunity to study the monuments, history and significance of the Syrian territory. However they may regard the political and economic side of the present mandatory régime, students in many fields the world over cannot but be highly grateful for and appreciative of the French work in the field of Syrian antiquities, important as it is for the history of the early oriental monarchies, for the study of Hellenism in its Greek and Eastern phases and for the development of Christian life and thought.

Aside from reports on current excavations on the one hand, and from special investigations on the other, the *Service des Antiquités* is publishing a series of important works which effectively synthesize the historical and cultural data that spade and pen have brought to light. Such are the new corpus of *Greek and Latin Inscriptions of Syria*, which is to replace the antiquated Waddington (published 1870), and the new and extensive *History of the Roman Province of Syria* (4 vols.). Undoubtedly this series will eventually boast of an *Historical Geography of Syria* as well.

Of the quality of these publications not only French scholarship in general, but also the actual appearance of Dussaud's Historical Topography, which ranks as Volume 4 of the projected *Bibliothèque Archéologique et Historique*, gives definite assurance. The work stands in a peculiar relation to the great enterprise of the *Service des Antiquités*. It is at once a necessary preparation for constructive work in Syrian history, and, as Dussaud indicates, an overture to the Historical Geography that must ultimately be written on the basis of both historical and topographical studies.

To anyone acquainted with the review *Syria*, with the study of the North Semitic monuments or even with the current discussions regarding the Glozel tablets,

the name of René Dussaud needs no introduction. His most recent publication is unquestionably an excellent piece of work. It furnishes him the opportunity to utilize his wonted philological acumen, his knowledge of present Syria with its monuments, and his control of oriental, classical, Christian and Mohammedan sources dealing with the topographical and historical problems of Syrian antiquity.

His treatment of the subject matter of both accepted and problematic identifications is clear, complete, concise and interesting. Maps, which form an important item in any such publication, are given without stint. There is a chart which correlates the sectional maps and another dedicated exclusively to trade routes. The territory covered ranges from Boşra and Haifa in the south to the Syrian Gates and Nisibis in the north. The order in which sites and place-names belonging to any given sector are discussed is that of their relation to ancient and modern arteries of travel.

Much work will need to be done by archaeologist, philologist and historian before satisfactory combinations of all the many place-names and sites of ancient and mediaeval Syria can be achieved. Dussaud has by no means endeavored to settle all of the problems involved. He frequently indicates a number of distinct possibilities and chooses between them. While one may not always agree with him, his opinions will require serious consideration. A storehouse of information, his work will be indispensable to all those in any way concerned with the topography and history of Syria.

CARL H. KRAELING

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STUDIES ON THE REMAINS OF ANCIENT BEAD-WORKERS IN IDZUMO, with the Tables of the Specific Gravity of Jade Magatama, etc., found in Japan and in Korea. Appendix: Corpus on the Polished Stone Arrow-points and Daggers Found in Japan. By Professor Kôzaku Hamada, Sadahiko Shimada, and Sueji Umehara. Volume X of the Report upon Archaeological Research in the Department of Literature, the Kyoto Imperial University. Published by the Tōkō-shoin, Tokyo, Japan, 1927.

As the reports of the Archaeological Institute of the College of Literature are in every case fully illustrated and carry a résumé in English of the Japanese text, they are of interest to European and American orientalists as well as to the Japanese. The current report consists of three parts: (1) a main section, entitled "Studies on the Sites and Remains of the Ancient Bead-workers in the Province of Idzumo"; (2) Tables of the Specific Gravity of Jade *Magatama* and Other Beads Found in Japan and in Korea; and (3) an appendix, a "Corpus of the Polished Stone Arrow-points and Daggers Discovered in Japan."

The question of the sites of ancient bead-working in Japan is first discussed, followed in logical sequence by a description of the remains found, a description of the technical methods used by both ancient and modern bead-workers, and a very interesting section, "Concluding Remarks," dealing chiefly with the jade question and offering the theory that the jadeite of which *magatama* beads of Japan and Korea were manufactured, was very likely imported "from the continent, south-east Asia, directly or through southern China, as the intercourse between south China and Japan already existed since the third century or so." This raises a second query as to whether the raw material only was imported or whether the importation came in the form of finished beads, to which the authors answer: "We do not know yet of any *magatama* or kindred forms of it that were ever made in China, either from remains or from literature, and the suggestion forwarded

by Dr. Laufer that it might have originated in some southeastern Asiatic region must be reserved for future research. At present it is better for us to deal with these beads as the indigenous ornaments of the Japanese, and consequently the raw materials were imported and worked into beads in this country or in Korea." This in turn raises a third point for discussion: "Was Japan proper or southern Korea the original seat of the fabrication of jade *magatama*?" The authors, again setting forth their reasons (derived largely from negative evidence), tell us that it is no longer possible to say that the *magatama* bead was indigenous to Japan only, or that any specimen found in Korea must have been imported from Japan. "But in any case wherever the *magatama* was used was the area of the old Japanese civilization expanded, and the people of bead-workers, *Tamatsukuribe*, distributed in various places in Japan, for carrying out the demands of the people, as indicated by the Shinto shrines of the ancestral founder of the bead-workers which existed and still exist, manufactured beads until the fashion of bead-wearing went out in the eighth century or so."

Diagrammatic sketches and fine collotype plates of sites, specimens found, tools and equipment, and the various steps in modern bead-making accompany the text.

The inclusion in this report of the corpus of polished stone arrow-points and daggers adds to the importance of the volume for archaeological students. Both diagrammatic drawings and collotype reproductions of the arrow-points and daggers are given.

DOROTHY BLAIR

YOKOHAMA, JAPAN

LES RICHESSES D'ART DE LA FRANCE; LA BOURGOGNE; LA SCULPTURE; par *Marcel Aubert*. Text, pp. xviii, pls. XVIII, folio.

This is the second part of the ambitious work dealing with the art of Burgundy. A review of the first has already appeared in the JOURNAL. While the policy is continued of making the work largely a collection of plates with comment, it would be amiss if attention were not called to the excellent if brief résumé given by Leon Hautecourt in the eighteen pages put at his disposal. His narrative begins with the geological formation of the province, follows its history from remote antiquity to the Renaissance and ends by showing the sources from which this remarkable school of art derived. One notes with pleasure the acumen with which the affiliations of the architects and sculptors with the south of France are pointed out and forcibly has been brought home the progress of art from the Romanesque period to the eighteenth century. This is the noble school which could count among its members in the fourteenth and fifteenth centuries Sluter, Van de Werve, Jean de Hasselt, Jean de Beaumetz, Melchior Broederlam, Jan Malouel, Henri Bellechose, and Michel Hestelin of Cambrai. It is amazing how much has been compressed into eighteen brief pages.

Nor is the comment on the plates in its way less noteworthy. M. Boinet has meticulously devoted himself to a description of the sculptures which appear on the Cathedral of Sens, the Museum of the town, the Madeleine at Vézelay and the Church of Saint-Père-Sous-Vézelay. Each description of the various monuments is supplemented by a bibliography for the particular building.

OLIVER S. TONKS

VASSAR COLLEGE

A CATALOGUE OF THE ANCIENT SCULPTURES PRESERVED IN THE MUNICIPAL COLLECTIONS OF ROME: THE SCULPTURES OF THE PALAZZO DEI CONSERVATORI, by *Members of the British School at Rome*. Edited by H. Stuart Jones. Text volume, pp. xxiii-407; Plates volume, plates 124. Oxford University Press, American Branch, New York, 1927. \$33.50

The first volume of this catalogue appeared in 1912. The war and the removal of the British School to its new building delayed somewhat the completion of this monumental work, but rather more of a retarding effect was due to the rearrangement by the Italian authorities of so many of the objects in the Museum. In fact, after the Catalogue was in print, because of the renumbering of many pieces of sculpture, it was necessary to add Concordance Tables in order to make identification easier.

The editor acknowledges the assistance of many people, among whom are Mrs. A. W. Van Buren, Bernard Ashmole (the present Director of the British School), W. Amelung of the German Archaeological Institute, and particularly Thomas Ashby, formerly Director of the School. These names alone would guarantee a work of superlatively definitive value.

The 124 large folio pages of plates which carry on the average six photographs on each plate page are up to the usual high standard of the Oxford Press publications. The captions below the photographs refer to the sections of the Text volume by provenience, that is by rooms, galleries, stairs and courtyards.

The two volumes constitute a *sine qua non*.

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STUDI ETRUSCHI, I, Comitato permanente per l'Etruria Rinascimento del Libro. Firenze, 1927.

In the spring of 1926, from April 27 to May 1, there was held in Florence the First National Etruscan Congress. It was a significant occasion and many Etruscan scholars of Italian and other nationalities attended it. Accounts of the opening of the congress and of the formation of a Permanent Committee for Etruria have already appeared in two volumes. This third volume is, however, called *Studi Etruschi*, I, for it is to be the first volume of a permanent periodical dealing with Etruscan studies and the official organ of the Comitato Permanente per l'Etruria. Its scope is considerable. It includes not only original articles on Etruscan problems—historical, archaeological, epigraphical and naturalistic—but communications on various subjects of Etruscan interest, a list of the excavations undertaken 1925-1926, and reviews of recent publications. There is nothing sumptuous about the periodical, the paper is cheap, the type not too good, the illustrations mere records. It is clearly intended solely for scientific information and as such occupies its very important place.

The seat of the "Permanent Committee" is to be, not unnaturally, Florence; and to still further aid the study of mysterious Etruria the Museo Archeologico is to house a gallery of Etruscan tomb paintings as well as one of casts of Etruscan sculpture and bronzes, while the library is to be strengthened in photographs and books relating to the subject. The whole is a splendid project which will win the approval of all classical scholars.

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THE REMBRANDT DRAWINGS AND ETCHINGS, by *John C. Van Dyke*. Illustrated. Charles Scribner's Sons. \$12.00.

Following the analytical method exemplified in his book on Rembrandt's paintings Professor Van Dyke now surveys the drawings and etchings usually ascribed to that master. The critical findings are staggering: out of some sixteen-hundred drawings, we may accept as autographic at most sixty; out of some three-hundred etchings, seventeen. The rest are nondescript, or go to his pupils. The argument for these wholesale eliminations is conducted with a rare degree of system and lucidity, and is supported by abundant illustrations most conveniently arranged. While we feel that the stylistic differences noted by the author are generally sound and objective, we also are convinced that a less rigid and more perceptive interpretation of this evidence would leave Rembrandt, if not with the old commercially swollen lists, at least with lists some ten times greater than those offered by Professor Van Dyke. The author has the defects of his purism. This, however, makes him an admirable critic of what is quintessential in Rembrandt, and this book, like its predecessor, may be read with profit and delight by those who cannot at all accept its extreme conclusions.

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DIE ARCHAEOLOGIE DES THUKYDIDES, by *Eugen Täubler*, pp. 1-139. B. G. Teubner, Leipzig, 1927.

This book consists of an essay, in 119 weighty pages, on the logical structure of the "Archaeologie," i.e., the first twenty-three chapters of the first book of Thucydides' history, together with a careful translation of these chapters, some notes, and a copious index. That Thucydides was somewhat influenced by the rhetorical teachings and fashions of his time, and that his literary composition involved more of conscious art than appears on the surface, has long been recognized. Professor Täubler, by an elaborate analysis and schematic presentation of the argument in Thucydides' Introduction, has furnished to us in great detail the evidences of a highly developed rhetorical technique. The analysis at times seems over-elaborated and unnatural; but it is very thorough.

This essay, however, is far more than a rhetorical analysis. The most recent criticism of Thucydides is tending to direct attention to the influence on the historian of that intellectual Sophistic, which had its origin in the "Ionische Aufklärung" of the sixth century, and was represented in the fifth century by such men as Hippocrates and Anaxagoras: some scholars now speak of Thucydides as the foremost spokesman of that "Enlightenment". Professor Täubler believes that Thucydides' Introduction is the most finished and the most essential part of his whole work; that it contains the demonstration in theory of a thesis, of which the confirmation in fact is supplied by the entire narrative which follows. This thesis is foreshadowed in the opening sentence; it is developed in the succeeding chapters from facts and events which are both proofs and illustrations; it culminates in the statement at the end of the Introduction that the increase of Athens' power forced the Lacedaemonians into war. The thesis amounts to this: The state is essentially an embodiment of power; the extension of power is its special form of life; war is an expression of that life and essence (p. 95).

Thucydides' Introduction, then, is not a summary of previous history, nor is the comparison of the Peloponnesian war with other wars a pretext, as many have supposed, under which the historian introduces his subject without seeming to depart from his principle of confining himself strictly to facts about this war

which could be asserted on reliable authority or adequately demonstrated. It is the presentation of the theory in accordance with which his book is composed. He believed that war is a natural expression of the power of the state, and since the collective power of those groups of states which engaged in this war was greater than that of any Greek state or group previously, it seemed to him obvious, before the war began, that this war *MUST BE* the greatest war thus far among the Greeks. This belief did not depend upon the actual events of the war which he intended to record, it was merely confirmed by them. Hence the superficial comparison of this war with the greatest previous war, the Persian war, is very brief, and stands at the very end, in Chapter 23. This chapter is not a repetition, nor is it out of place. It is a summary of the confirmation in fact of what has been demonstrated as a theory, and affords a transition to the account of the events of the Peloponnesian war in detail.

Professor Täubler has made an important contribution towards our understanding of Thucydides.

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